

California State University, San Bernardino

CSUSB ScholarWorks

Theses Digitization Project

John M. Pfau Library

2000

Strategies to increase the critical reading skills of secondary students

Laurie Ann Guy

Follow this and additional works at: <https://scholarworks.lib.csusb.edu/etd-project>



Part of the [Education Commons](#), and the [Reading and Language Commons](#)

Recommended Citation

Guy, Laurie Ann, "Strategies to increase the critical reading skills of secondary students" (2000). *Theses Digitization Project*. 1684.

<https://scholarworks.lib.csusb.edu/etd-project/1684>

This Project is brought to you for free and open access by the John M. Pfau Library at CSUSB ScholarWorks. It has been accepted for inclusion in Theses Digitization Project by an authorized administrator of CSUSB ScholarWorks. For more information, please contact scholarworks@csusb.edu.

STRATEGIES TO INCREASE THE CRITICAL READING
SKILLS OF SECONDARY STUDENTS

A Project
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in
Education:
Secondary Education Option

by
Laurie Ann Guy

June 2000

STRATEGIES TO INCREASE THE CRITICAL READING
SKILLS OF SECONDARY STUDENTS


A Project
Presented to the
Faculty of
California State University,
San Bernardino

by
Laurie Ann Guy
June 2000

Approved by:


Dr. Sherry Howie, First Reader

6/5/00
Date


Dr. Alvin Wolf, Second Reader

"Copyright 2000 Laurie Guy."

SOON-WEI TIA
PARCEMENT D'ART
100% COTON FINE

ABSTRACT

This paper will examine what research has revealed about reading and learning in the areas of word recognition, scaffolding to develop understanding, metacognition and application of new knowledge in real world situations. The study then will go on to link what is known about learning to strategies that have already been developed by secondary teachers to increase critical reading skills. This collection of valuable teaching strategies should demonstrate the wide variety of options available to secondary teachers as they strive to improve students' analytical reading skills.

ACKNOWLEDGMENTS

I would like to thank Dr. Howie for her guidance, patience, and inspiration. Also, I am grateful to Dr. Wolf, who supervised my student teaching many years ago, and was someone I always hoped would be my second reader.

To Greg

TABLE OF CONTENTS

ABSTRACT	iii
ACKNOWLEDGMENTS	iv
INTRODUCTION	1
REVIEW OF THE LITERATURE	9
STRATEGIES: TEACHING WORD ATTACK SKILLS	20
STRATEGIES: CONNECTING NEW CONCEPTS WITH PRIOR KNOWLEDGE AND TEACHING ACTIVE READING	49
STRATEGIES: FINDING RELEVANCE IN TEXT THROUGH SOCIAL INTERACTION, CAREER APPLICATIONS, AND CREATIVITY ...	76
CONCLUSION	108
Appendix A- Greek and Latin Roots	111
Appendix B- Word Maps	126
Appendix C- Vocabulary Cards	127
Appendix D- Anticipation Guide	128
Appendix E- Graphic Organizers	130
Appendix F- Concept Maps	145
Appendix G- Resume and Cover Letter	148
REFERENCES	151

INTRODUCTION

A focus of national concern is that students are graduating from high school with lower reading, writing, and thinking skill levels than ever before, and are not adequately prepared to compete in the work world with youth from other industrialized nations. As the general public, government agencies and politicians have become determined to find a cure for the ills in public education, one fact has become apparent to all: many of our students cannot read at grade level. Language development skills and reading comprehension exercises are difficult as students struggle with simple decoding of written texts. Fostering critical thinking skills is a step beyond basic understanding of written text, and cannot be rigorously implemented if the students cannot understand what they read. High school students need to be able to apply what they are learning to real life situations in order to understand the purpose; but, again, application and synthesis are not possible if students can not find meaning in what they read. In order to develop at progressively higher levels, the skills that make literature and all other written text come to life must be taught at all grade levels, not just in elementary school. Word attack skills, comprehension, and critical thinking skills must be taught at the high school level if students are to be prepared to handle complex information on their own.

The entire community must stress reading as a priority for young people. Many students spend so much time watching television and playing video games that they do not learn how to sit and read for meaning. Attention spans are short and young people in our society have learned to expect action, color, and excitement from their recreation activities. The desire to find pleasure in prolonged periods of reading difficult literature is a potential that must evolve through interesting reading experiences if we hope to elevate the mentality of the general public. It is not enough to expect this accomplishment from the young people of today; adults must model this behavior instead of spending countless hours of inactivity viewing mindless sitcoms, juvenile game shows, and soap operas. Families should have quiet times in the evenings when reading is stressed and television is off. Parents should talk to their children about books they are reading. The local public library should be familiar to all family members. The Carnegie Council on Adolescent Development in 1989 stated, "All students need to be supported academically by caring adults in order to find education meaningful and challenging."

The intent of this study is to examine previous research on the nature of reading at the secondary level and to focus on specific problem areas that have already been identified. The next step will be to provide an

overview of specific strategies secondary teachers can use to master reading difficulties in all subject areas. In addition, instruments such as lesson plans, activities and study guides that have already been developed and have proven to be useful in implementing these strategies will be provided.

If we expect secondary students to read literature for pleasure, decipher technological information from manuals, apply math problem solving strategies to word problems and break down the rhetoric in political pamphlets, these skills must be taught at the high school level and all members of society must display an interest and ability to work at these higher levels of reading.

Students who do not practice reading at home with their parents or who are not given enough attention in the classroom as they are learning to decode written text often do not develop the necessary skills to comprehend what they read. Children may not be able to find meaning in the story, they may be unfamiliar with many of the vocabulary words and not know how to discover their meaning from the context of the sentence, and they may not ask questions along the way to check their understanding. They may not recognize the main idea of the text or be able to find supporting details that make the information logical and coherent. The Reading/Language Arts Framework states, "The involvement of parents in their children's early years is

an important predictor of the children's success in school and is more important than economic status in predicting academic learning." Reading strategies that are learned at an early age help students to continue to develop their reading skills as written text becomes more difficult; those who cannot find ways to discover meaning in what they read will eventually become overwhelmed by the chore of reading and may give up. Young people must be taught these skills throughout their education.

When students enjoy reading, they learn to read on their own. As time is spent in the process of reading books that are interesting, students develop a readiness for learning. Books help young people to think about things from different perspectives, to use their imaginations, and to think for themselves. Reading fosters higher level thinking skills. As young readers begin to wonder why characters behave in certain ways, they are analyzing motivation. As students determine if certain actions are right or wrong, they learn to evaluate. As they examine text carefully, they learn to become proficient readers. The more young people read, the more they practice and refine reading skills. Decoding skills, vocabulary knowledge, syntactic understanding, and comprehension strategies are developed by skilled readers. Reading speed also increases. "The average skilled reader reads approximately three times as many words in a reading group

time as the average less-skilled reader" according to a study by the Comprehensive Reading Leadership Program in 1997. Students who have not spent time reading on their own must learn to acquire these skills, especially at the secondary level.

It is important that reading material that is appropriate for high school students be available to them. It is a serious problem that funding for high school libraries has been cut back so severely that often reference material is outdated, resources available through technology are limited, and literature is sometimes archaic and unappealing to secondary students. Teenagers who do not have a lot of experience with reading need a wide variety of reading materials available to them to stimulate interest. The Framework states, "High quality literature and informational reading selections should be included at every grade level."

Students face many outside pressures that make learning difficult. Many students in California today come from homes where English is not the primary language. Many students come from disadvantaged homes where economic hardships present day to day challenges. In some single-parent homes young people spend evenings alone while caregivers work. Newspapers, magazines and other forms of literature are often not available in the home. In many instances the parents do not speak or read English. Twenty

four percent of the students in California public schools in 1998 were Limited English Proficient according to state statistics. Some students do not have the advantage of learning from the adults in their families. "Reading failure is a serious national problem that cuts across all ethnic and socio-economic groups" according to the Orange County Department of Education.

If we expect secondary students to be able to read textbooks in science, integrated math, economics, psychology, and other content areas, they need to be taught reading strategies in these fields. We cannot expect young people to come into the classroom with the experience necessary to be successful with these diverse, complex texts. Issues such as lack of motivation, truancies, and high drop out rates do not necessarily reveal that young people have lost the desire to learn (47,306 out of 1,604,884 students dropped out of high school in California in 1998 according to State Department of Education statistics). Often the basis for frustration and hopelessness that secondary students feel is due to their inability to master difficult texts. It is essential that secondary teachers be trained and feel competent to help students understand reading material in their subject area.

Secondary students need to develop reading skills continually. The strategies learned in elementary school will not meet all the needs of a student who is faced with

figuring out complex secondary texts. Younger students may not be beyond the concrete level of thinking, and, therefore, are not ready to employ higher levels of critical thinking. In order to learn content meaningfully, students need to question, predict, and hypothesize. They need to look up unfamiliar vocabulary so that they can understand text. Learning in all subject areas requires that students have the reading skills to decipher the text for those content areas. If young people cannot comprehend textbooks, technical manuals, research papers, critical analysis of literature, charts and graphs, math word problems and so on, they need to be taught the skills that are required to make these types of reading meaningful and useful.

Learning is an ongoing process. Learning to read difficult text requires reinforcing reading strategies and applying a variety of techniques to make sense of the wide array of information in all the subject areas that secondary students must learn to master. Teachers must help students figure out unfamiliar words through identifying antonyms, synonyms, and homonyms, knowing Greek and Latin roots, prefixes and suffixes, as well as finding meaning in the context of sentences. Teachers need to help students see connections so that new information can be linked to previously acquired knowledge. Graphic organizers, concept mapping, and writing essays or research papers are

strategies that help students with comprehension and make new information easier to remember. If students are to become critical thinkers, they need to find meaning in what they read through discussion, analysis, and learning to apply the knowledge they have gained in all subject areas to their own lives. Research reveals specific areas of weakness that plague many secondary students, yet there are ways for teachers to help adolescents overcome these difficulties.

REVIEW OF THE LITERATURE

The research that has been conducted on secondary students in recent years seems to identify four major areas of reading difficulties. The first area is problems with vocabulary and word analysis that lead to problems with decoding. Research indicates that vocabulary development is important in all subject areas as it directly affects students' ability to conceptualize information. One of the problems that has been identified is lack of phonemic awareness, or the ability to recognize that words are made of sounds. This weakness often means that students will not be able to increase their reading vocabularies and, therefore, will not be able to master more difficult texts. The second area of difficulty for students is reading comprehension. One area of study that has received attention in recent years is schema theory, or the idea that, in order for a learner to understand and remember new knowledge, it must be linked to previous knowledge. This applies directly to reading comprehension and memory. Another field of study is metacognition, or the reader's conscious ability to actively monitor learning strategies while reading. Finally, it is clear that secondary students must be able to recognize a purpose for the reading in order to find meaning and the motivation to be actively involved with the text. The research on these four areas of learning difficulties reveals some explanations as

to why students are falling behind in their high school classes.

To begin, language develops as humans use symbols, letters and words to organize their thoughts and to communicate their ideas to one another. Words are the basis of language and therefore they become one of the most important aspects of communication. It is through words that information, impressions and experiences are conceptualized. Word labels represent ideas, but the words themselves are not concepts. The students must make their own associations, differentiate, generalize, and make abstractions in order to construct meaning. As readers are exposed to new concepts from a variety of sources, they must increase their vocabularies in order to gain precise and accurate communication with the author and text.

Difficulties with decoding words in sentences and with learning new vocabulary are sometimes linked to inadequate development of phonemic awareness. Liberman and Shankweiler (1985) described how it is necessary for students to have a conscious awareness that English is made up of phonemes or sounds. Sounds are combined in speech, but when we read we must hear the sounds that the letters make and understand that these sounds make up words. Because English is an alphabetic language, the printed symbols themselves only make the sounds (the letters), but when these symbols are combined and translated into the

words of our vocabularies, then they represent concepts. This process of integrating or combining symbols that are recognized to have meaning is called decoding.

Phonics usage differs from phonemic awareness in that it is a process of memorizing letter and sound relationships and rules so that readers can sound out unfamiliar words. This does not necessarily mean that the readers will hear and understand the letter-sound-symbol relationship. They may be able to sound out the words in a sentence and not comprehend the meaning of the sentence.

Phonemic awareness means that students understand that small sound units (phonemes) make up the sounds of oral language. It is also a realization that these sounds can be manipulated to make new sounds and new words. With this awareness comes the understanding that words in print correspond to spoken language.

Adams (1990) defined five levels of phonemic awareness. The first stage is appreciation of the sounds of spoken language through appreciation of nursery rhymes. The second is the ability to compare and contrast sounds in the beginning, middle or ends of words. The third stage is the ability to blend or split syllables. The fourth is the ability to segment sounds in syllables. The fifth stage is the ability to manipulate phonemes by deleting sounds to make new words. Some of the components of phonemic awareness, such as phonemic synthesis or the blending of

sounds, need to be developed prior to learning to read, and others, such as phonemic analysis (segmenting) seem to develop along with beginning reading skills.

There is a high correlation between achievement in reading and phonemic awareness (Juel, 1991). Phonemic awareness also has a high correlation to future reading achievement (Liberman and Shankweiler, 1973). As children decode words by making the letter-sound-symbol connection they store the information in their memory. As they decode the same word many times, they develop automaticity, meaning they automatically recognize many words. This enables readers to grow in their reading ability and, the more they read, the more these skills develop.

In the novice or poor reader, comprehension is limited primarily by difficulties in deciphering print; in other words, if beginning readers demonstrate difficulty with reading comprehension, it is predominantly because of impaired word reading. The central role played by fluent decoding and word recognition in learning to read does not, in any way, minimize the need for children to understand what they read. Without question, the construction of meaning from text is why we teach reading. However, relating information from a page of print to prior knowledge is exceedingly difficult to do if the text cannot be deciphered quickly, automatically, and effortlessly

(Lyon, 1995). Students who struggle with decoding have difficulty getting deep meaning from text.

Reading comprehension can be divided into three levels: the literal level, the inferential level and the creative level. Although these levels are sometimes given different names, the overall idea is generally the same. At the literal level students can summarize the text, recognize the sequence of events, answer questions about the material (who, what, where, when, why), and explain the meanings of words and sentences. They will not, however, be able to explain deeper concepts. At the inferential level readers relate to the text actively. They can explain the main idea of the text, understand relationships, infer concepts, judge whether the information seems logical and authentic, reason on a metaphorical level, and problem solve. At this level the reader is trying to relate the new information in the text to what is already known. Finally, at the creative level readers understand the information in such a way as to make deep connections and produce original ideas. The material may alter their thinking or help develop personal values. The information can be related to other content areas and it can be stored in the memory for future use. These different levels of reading comprehension work together and are necessary for a thorough understanding of the text (Smith, 1978).

Research demonstrates that one direct influence on reading comprehension is learning active reading strategies. These are the skills of metacognition. Metacognition is the ability of a person to know about and control his or her own thinking processes. Efficient readers have some control over their reading strategies (Brown, 1981; Garner and Reis, 1981). The two aspects of metacognition are awareness and action.

Awareness is the area of metacognition that directly influences the reader's involvement with the text. This self-reflection or thinking about one's own cognitive behavior allows the reader to be constantly aware of his or her own level of comprehension. An active reader should have an awareness of the following:

1. What should be accomplished with the reading?
2. What is already known about the topic?
3. What needs to be known?
4. What strategies can be used to gain meaning?

The reader is actively communicating with the author and the text to make meaning.

The action part of metacognition comes into play when a reader realizes there is a problem with his or her understanding of the text. When this occurs the reader should ask:

1. What strategies can be used to solve the problem?

2. What problem-solving techniques are used to clarify meaning?

3. Can this problem be solved with a similar technique to one used previously?

4. What should be done next? (Langer, 1982).

Developing self-questioning techniques improves students' comprehension and retention (Anderson et al., 1978).

One of the most effective ways to improve reading comprehension is to help students make connections to information they already know. Schema theory was developed by educational psychologist R.C. Anderson to explain how new information is fitted into the schemata, or framework of knowledge that is already in existence.

Schemata are the experiences and background information a reader brings to the text. It is this related knowledge that gives the reader a basis or foundation to which new information can be connected and combined. Schemata are unique to each individual and depend on the experiences and interactions that person has had in his or her lifetime.

Schemata grow and change constantly as the learner is exposed to new information. Schemata are organized meaningfully, and, as they expand, they overlap as well as become more detailed and specific. Each schema is embedded in other schemata and contain subschemata (Anderson, 1977). This complex relation of knowledge acquired during a

person's life enables him or her to make sense of new concepts that authors present in text.

Students' background knowledge of the information that will be presented in the text affects their comprehension. It affects how readers will organize information in memory, what information will be brought to mind as they read, what associations will be made, what vocabulary they will master, and what will be remembered (R Anderson, 1978; Spiro, 1980; and Langer, 1981). In order for students to comprehend new information in text, they must be able to relate the vocabulary and the concepts to schemata, or knowledge they already have (Rumelhart and Ortony, 1977; R. Anderson, 1977).

The research of today goes beyond the mechanical act of decoding to a broader view: the role of language in cognitive development. Early studies of language development were more simple and straightforward as a child was to read and come up with the right answers for teachers. However as text becomes more dense and abstract the mature reader must rely on his or her own experiences and background to make meaning. The text then becomes more relevant as the reader begins to understand that what he brings to the text is crucial to the meaning making process (Carey, Smith and Harste, 1981).

It is necessary for learners, especially secondary students to recognize a purpose for their studies. The

rationale for a meaning-based approach to education is based on research and theories of cognitive development that have changed radically in recent years. The separation of mind and body proposed by Descartes in the late 1700's worked well for the mind-as-machine metaphor that helped explain anatomical function and thought processes throughout the 1800's. The behaviorists such as Watson and Skinner believed that human behavior and learning were programmed responses; they demonstrated these theories with animal research. Chomsky (1957) disputed their findings as he studied language acquisition in children. The cognitive theories of Vygotsky (1954) and Bruner (1973) differed radically from the behaviorists as they proposed that humans learn from one another and this interaction is crucial to human development.

Jerome Bruner's constructivist theory of learning proposes that learners construct new concepts based on knowledge they already possess. Learners must depend on their own schemata to give meaning and organization to new information. In his later work (1990), he included the social and cultural aspects of learning. In Beyond the Information Given, (1973) Bruner explains that to make meaning, learners need experience with symbol manipulation, public dialogue, and private reflection in order to go beyond copying others' ideas to generate their own.

A meaning-centered approach to teaching is based on these theories. Language is essential to communication and conceptualization; the study of language acquisition reveals that children will sort out language and make it fit their functional needs if the language usage is authentic (Goodman, 1987). There are rules that govern language usage, semantic, syntactic and graphophonemic, but language must have pragmatic applications to be valid to the learner (Vacca, 1981). The basic assumptions of a meaning based approach to teaching are that students need to engage in hands on learning, generate their own questions, take risks, trust the learning community and learn in the context of usage.

In a meaning-centered approach the social nature of learning is recognized. Teachers and learners are both risk-taking participants in an environment that encourages active involvement in learning by doing. Students become motivated when reasoning, analysis, evaluation, and decision-making processes seem meaningful in solving real problems that are relevant in their lives. Secondary students need to see practical applications for what they learn so that reading difficult text, working at comprehension, and remembering new information become important to them.

Research shows that readers who employ a variety of reading strategies have higher levels of reading

comprehension (Spiro, 1980). There are many strategies that teachers of all subject areas can employ to help students with vocabulary development, comprehension and understanding real life applications for what they learn. Developing critical reading skills in all subject areas has become essential as text becomes more difficult and expectations continue to increase for high school students. Secondary teachers can help students succeed in all disciplines if they build strong foundations for acquiring new vocabulary, help students assimilate new concepts, and make curriculum relevant.

STRATEGIES: TEACHING WORD ATTACK SKILLS

Reading comprehension is increased when students learn word attack skills and understand word relationships. Teaching strategies that will help students tackle unfamiliar words and recognize signal words that reveal the structure of the text, or the logical progression of meaning within a complex and lengthy text, can help readers to identify important concepts instead of becoming overwhelmed. Reading speed and comprehension improve when students know that there are ways to find meaning in high school level reading material in all subject areas that at first may appear too difficult.

If secondary students are to be able to discuss and grasp high level concepts in subject areas, it is necessary for teachers to help them master the text and use the vocabulary. Independent critical thinking is not possible if students cannot apply specific words and phrases that appropriately describe distinct concepts.

At the elementary level students learn to sound out new words as they begin to recognize that the symbols of our written language represent the words of spoken language. This basic skill is not the focus of content area instruction at the secondary level; if students' reading levels are so low that they are falling far behind, remedial reading classes are necessary. But many students who struggle with secondary texts can be taught strategies

that would help them figure out new words, make meaning through context, determine relationships between words, and recognize unusual wording patterns.

Critical reading comes from precise interpretations of text. If students skip over unfamiliar words oversimplifications or distortion of meaning can occur. A close reading of text allows the reader more fully to understand the author's purpose and careful analysis of the word choice reveals the author's reasoning. As readers become more confident in examining logic patterns, they develop the ability to understand the scope and limitations of what they read. They learn to question the ideas being presented and examine their own beliefs. They should then develop the courage to change and grow from new ideas.

Identifying Roots, Prefixes and Suffixes

Often students reach high school without an awareness that many words have Greek and Latin roots. They do not recognize that an understanding of prefixes and suffixes enables readers to figure out how the root is altered by these additions. When an unfamiliar word appears in text, students should be taught to examine the root, see if it relates to other words that they know have the same root, and see if the prefix or suffix on that root can be deciphered. When secondary students have knowledge of word attack skills, new words should no longer be threatening;

it can become a game to see if the meaning of word can be deciphered just from prior knowledge. (For Greek and Latin Roots, see Appendix A.)

Creating Word Maps

It may not be effective to have students memorize long lists of roots, prefixes and suffixes. Instead, the use of word part maps can help young people link related words to one root. When words are grouped together in this way it should reinforce the meaning of the root and make it easier to remember. To teach students to make word part maps follow these steps.

1. Write the word that is unfamiliar in the center of a piece of paper.

2. Group related words around it that you are familiar with or add related words you find in the dictionary.

3. This cluster will resemble a wheel. Have the root of the new word and its definition in the center of the cluster. (For Word Maps, see Appendix B.)

Learning new words or roots by linking them to other words with the similar meanings enables students to study how roots, prefixes and suffixes affect all words and recognize patterns.

Knowing roots, prefixes and suffixes can give secondary students the confidence to try to make sense of unfamiliar words in text and increase comprehension.

Vocabulary Development

Building vocabulary is essential to enhancing readers' understanding; as readers automatically are able to recognize and define a wide range of words, their speed and comprehension develop at an accelerated pace. The more words the readers recognize and understand, the better they are able to construct meaning from text. In addition, students cannot speak confidently about a concept in any subject area unless they are comfortable using the terminology related to that field of study.

Vocabulary games similar to spelling bees or vocabulary bingo are fun ways to introduce new words and reinforce meanings. Another fun game is Balderdash; two teams are given different words and their definitions. The team will then make up additional false definitions and the opposing team will have to guess which definition is correct. The students become proficient at figuring out which definition is best and working with unfamiliar words becomes less threatening. There are many different vocabulary games and that make learning new words fun for secondary students.

Another effective way to have students work with vocabulary is by using vocabulary cards. These cards give the part of speech, related words, original context, dictionary definition and the student's own sentence.

Working with new words in this way enables readers to become familiar with the words as they study. It is important that students not only know the definition of new words, but also that they are able to use them correctly. (For Vocabulary Cards, see Appendix C.)

Finding Meaning in Context

Knowing how to use new words accurately in sentences is crucial if students are going to incorporate them into their vocabularies. It is important that students learn words in context so that they are able to use them right away. When readers learn to recognize context clues in writing, they discover many ways to figure out new words as they read. Students who can figure out the meanings of unfamiliar words by examining how they are used in sentences feel more control and they gain the confidence to tackle difficult text.

Using context clues means finding the meaning of unfamiliar words by examining the other words in the sentence and the meaning of the whole sentence. Students should be taught to recognize all the different types of clues.

- One type of context clue is the restatement clue, which gives the meaning of an unfamiliar word by restating or explaining it, or using a synonym or a group of words that has almost the same meaning as the unfamiliar word.

Writers use the following hints to indicate they are using that type of context clue: or, in other words, that is, such as, which is, that is to say. Dashes, commas, punctuation marks, and parentheses can also indicate that a restatement is to follow.

- Use of example is another type of context clue. The writer explains the meaning of an unfamiliar word by using an example. In some cases, the following words indicate this type of context clue: such as, for example, for instance.

- Another type of context clue is comparison clue that relates an unfamiliar word with a familiar word or concept. The following words often indicate this type of comparison: like, as, as if.

- Contrasting a familiar word with an unfamiliar word or phrase is another type of context clue. The following words often indicate a contrast: but, on the other hand, however, yet, not, although.

- Inference clues are clues to word meanings that can be found in different parts of the same sentence or somewhere else in the paragraph.

Example:

1. Julie thought the mansion was a bit too ostentatious.
2. Mark was eager to receive the award for his laudable act.

Teach students to recognize context clues by identifying the type of context clue used in a sentence and write the meaning of the word based on their contextual guess.

Example:

1. The cytoplasm of the cell, a thick gel-like substance, contained the nucleus, mitochondria, and other organelles.

Type: Meaning:

2. The intricate embroidered design on that gown is very different from the simple design on my dress.

Type: Meaning:

3. The tropics have a balmy climate. I wouldn't like living where there was so much humidity.

Type: Meaning:

Understanding the main idea of a paragraph can sometimes help students to figure out the meaning of an unfamiliar word. Have the students read paragraphs and determine the meanings of unfamiliar words from the main idea of the paragraph.

Example:

George Walker was accused of organizing a meeting without the permission of the necessary officials. In the indictment read to the jury, he was charged with creating a public disturbance.

1. indictment means:

- a. social agenda
- b. local law
- c. formal accusation

The farm-workers were exploited. They worked long hours for little pay. The equipment they used was unsafe.

2. Exploited means

- a. to try to devise a plan
- b. to blow up
- c. to use unfairly for one's own advantage

When working with new vocabulary from a novel, Suzanne Beauvais, a teacher at Orange High School, has the students look at prefixes, roots and suffixes. Then they examine the meaning in context, guessing at the definition of the unfamiliar word. The students are then asked to find the dictionary definition, and finally they use the word in their own sentence.

Vocabulary from A Separate Peace

- 1. interval
- 2. assert
- 3. prodigious
- 4. inveigle
- 5. rhetorically

1. "Looking back now across fifteen years, I could see with great clarity the fear I had lived in, which must mean that in the interval I had succeeded in a very important undertaking: I must have made my escape from it."

INTERVAL

The prefix inter means between, among

Your Contextual Guess:

Dictionary's Definition:

Your sentence:

2. "Standing on this limb, you could by a prodigious effort jump far enough out into the river for safety."

PRODIGIOUS

Your Contextual Guess

Dictionary's Definition

Your sentence

Recognizing the Organization of Text

Secondary students should also be taught to recognize signal words that help readers to understand how ideas relate to each other, to follow the information presented in text, and in lectures. When they learn to identify key words that show how that information is organized and how it is being presented, their comprehension is increased.

Signal words are words that connect two ideas in a piece of writing. They can help readers see how two ideas relate to each other and fit together. When reading look carefully for any signal words. These words are the textbook author's way of letting the reader know how to interpret the information and how to predict information following a signal word.

Have students write paragraphs that reveal relationships between concepts such as cause/ effect, compare or contrast, listings and so forth. Have them use some of the following terms.

Signal Words

Words that signal example:

for example (e.g.), such as, including, for instance, like, to illustrate

Words that signal listing:

Also, in addition, finally, another, moreover, furthermore

Words that signal sequence:

First, then, after, since, second, finally, before, previously, now, next

Words that signal comparison:

Similarly, in the same way, only, but, also

Words that signal contrast:

Although, on the other hand, even though, however,
never the less, yet, in contrast, at the same time,
conversely

Words that signal a cause/effect relationship:
as a result, if... then. Therefore, due to, leads to,
consequently, thus so, accordingly

Words that show the author is summarizing:
in summary, in conclusion, finally, as a result, in
brief, accordingly, thus

Words that indicate concession:
granted that, though, even though, in spite of, while
it may be true, although

Words that present a logical order:

Space:

Above, under, nearby, opposite to, adjacent to,
across, beyond, in the background

Time:

Then, after, one day, subsequently, first, second,
soon, mean while, when, once, afterward, next,
yesterday

Value:

Initially, first, secondly, finally, next, last,
indeed, truly, to repeat, in fact

Words that are used frequently on essay tests are also
important for secondary students to fully understand if

they are going to successfully demonstrate what they know on tests. Many secondary students are not clear about the meanings of test words. It can be expected that secondary students will score much higher on tests in all subject areas if they comprehend exactly what is required in their response to the test questions.

Teachers should make certain students understand common direction words used in essay questions:

Essay Words

ANALYZE- Break the subject (an object or concept) down into parts, and explain the various parts.

COMMENT ON- Express your opinion about a subject.

COMPARE- Show how two things are both similar and different.

CONTRAST- Show how two things are different.

CRITICIZE/ CRITIQUE- Point out the strengths and weaknesses, good points and bad points of something.

DEFINE- Give a clear, concise meaning of a term, including the class to which a thing belongs and what differentiates that object from all others in the class.

DESCRIBE- Write about the subject so that it can be visualized; tell how it looks or happened, including who, what, when, where, why.

DIAGRAM- Make a drawing of something, and label its parts.

DISCUSS- Give a complete and detailed answer. Give as many important main points about the subject as you can.

ENUMERATE- Write in list or outline form, giving points one by one.

EVALUATE- Give your opinion of the value of the subject; discuss its strengths and weaknesses, good and bad points.

EXPLAIN- Tell how to do something. Make the subject easy to understand by giving clear reasons, facts, and details.

ILLUSTRATE- Make the subject clear by giving examples or drawing a diagram or picture.

INTERPRET- Tell about the importance of the subject. Explain the results or the effects of something.

JUSTIFY- Give good reasons for decisions, actions or conclusions.

PROVE- Show that something is true by giving facts or logical reasons.

RELATE- Show how things are alike or connected.

STATE- Give the main points in brief, clear form.

SUMMARIZE- briefly give the main points or facts about something, like the summary of a chapter.

TRACE- Tell about something in the order/sequence that it occurs or occurred.

Dr. Sherry Howie, a professor at CSUSB, uses the following matching exercise to help students identify the different types of responses.

Read each passage below. Select one of the terms listed in 1-8 to identify the logical pattern of the response.

- | | |
|------------|-------------|
| 1. COMPARE | 5. CONTRAST |
| 2. DEFINE | 6. ANALYZE |
| 3. TRACE | 7. EVALUATE |
| 4. JUSTIFY | 8. PROVE |

1. A fast-food worker is somewhat like a bank teller. They both have to wait on customers who wait in long lines and want them to work as fast as possible. They also stand on their feet all day and have to put up with rude, pushy people. On the other hand, the bank teller handles money instead of food and gets a monthly salary rather than an hourly wage. Also, the bank teller earns more money, and usually receives benefits.

2. When I first came to the `U.S. from Hong Kong, I didn't speak English very well, so I had to find a job that didn't require much communication in English. First, I started to work in a Chinese restaurant as a dishwasher because it was easy and I didn't ever have

to speak English. I quit after four months because of the low pay and long hours, and I found a busboy job in a Thai restaurant on the weekends. That job was more enjoyable because I got tips from the customers. When I started at San Francisco State University, I tried to get a job on campus, and I was hired after one semester as a cashier in the University Bookstore.

3. I used to work as a part-time sales clerk in an import-clothing store which specialized in bridal clothes. My major responsibility was to greet the customers and help them find the merchandise they needed. But when business was slow, I had to take inventory of all the dresses in the store, bring out new items and put prices on them. Also, at the end of the day, I needed to clean all the counters and the mirrors.

Exercises such as this help students to recognize appropriate responses to questions that are often on tests. They can also write their own answers to questions based on literature and then discuss whether their answer is exactly what is required by the essay question. Critical reading of test questions and learning appropriate wording of answers enables students to relate what they know successfully.

Dictionary Skills

If students reach high school lacking the ability to use dictionaries effectively, they are at a great disadvantage. Students should be taught the rules that govern spelling. They should also be familiar with the symbols used in dictionaries to denote syllable breaks, stressed syllables, pronunciation and different verb tense spellings. If a new word is introduced and the student cannot use a dictionary to decipher both meaning and pronunciation they are at a disadvantage.

Students should be taught that a dictionary lists words in alphabetical order. It gives the meaning of the word and other information.

Example:

rehydrate (re'-hi-drat)v
to restore fluid

The word printed in dark type is the entry word. Entry words give the correct spelling and show how to divide a word into syllables. The information in parentheses is called the respelling. It shows how to pronounce the entry word. Symbols or letters are used for each sound. A pronunciation key in the dictionary provides information on how to understand these symbols. Accent marks show what syllable is stressed when pronouncing the word.

After the respelling, the dictionary notes the part of speech of the word. These are listed as abbreviations.

n.- noun

v.- verb

adj.- adjective

adv.- adverb

conj.- conjunction

prep.- preposition

interj.- interjection

The definition of the word is then given.

Students need to learn the pronunciation symbols to help them sound out new words. Also, they can study dictionary entries by considering the following:

1. How many syllables does the entry word have?
2. What syllable is accented?
3. What part of speech is the word?
4. What is one definition of the word?
5. What special symbols does the respelling contain?

Teaching Spelling

Students can also benefit from learning spelling rules that will help them spell unfamiliar words.

Example:

SPELLING RULES

1. Add s to the singular forms of most nouns to make plurals.
2. When the noun ends in s, x, ch, or sh, the plural generally is formed by adding es.
3. a. The plural of a noun ending in y preceded by a consonant is formed by changing y to i and adding es.
b. The plural of a noun ending in y preceded by a vowel does not change y to i EXCEPT for words ending in guy.
4. a. A word ending in y preceded by a consonant usually changed y to i before a suffix unless the suffix begins with i.
b. A word that ends in y preceded by a vowel usually keeps the y when a suffix is added.
5. a. A word that ends in silent e generally keeps the e when a consonant is added.
b. A word that ends in silent e generally drops the e when a suffix beginning with a vowel is added.
Exceptions to Rule 5.
6. Words ending in ce and ge keep the letter e before able and ous.
7. A one-syllable word that ends in one consonant following a short vowel before a suffix that begins with a vowel.

8. A word of more than one syllable that ends in one consonant following one short vowel generally doubles the final consonant before a suffix beginning with a vowel if the accent is on the last syllable.

9. The letter i is generally used before e except after c. There are many exceptions, as: either, neither, neighborhood, weigh, and leisure.

10. An apostrophe is used to show that a letter has been omitted in a contraction.

Spelling is important because it teaches sound patterns that will help students with decoding. Poor spelling skills can disrupt reading fluency and obstruct vocabulary development. (Adams, Treiman & Pressley, 1996).

Understanding Analogies

Critical reading of text is developed as students analyze similarities and differences in ideas. They must be able to distinguish fact from opinion. Students should realize that reasoning is based on assumptions that may not always be entirely accurate. Recognizing the relationships between words and concepts can be taught through the use of analogies. Analogies show the comparisons between sets of objects. As students begin to see the relationships between words and recognize categories, they can sort out important information and understand links to other words with

similar meanings. Using analogies helps students to better understand new words, and when things can be sorted into similar categories, connections become more apparent. Working with analogies enhances critical thinking by enabling students to organize information and experiences in different ways; knowledge can then be broken apart, reconstructed, and integrated in a variety of situations.

An analogy is a special type of comparison. Most comparisons examine two objects or ideas, but an analogy compares two sets of objects or ideas. Analogies are useful for seeing and expressing relationships, but they require a special way of thinking.

Looking for relationships between pairs of words can reveal new meanings for familiar words. Understanding the meaning of new words is easier when we see how they relate to other words. Analogies can strengthen thinking abilities. Through analogies students learn to compare objects, actions, ideas and to recognize categories and relationships. First have students sort out important information from the unimportant.

Example:

Circle the one item that does not belong in each of the following lists.

hair heart liver lungs

quiet hectic calm. serene

wolves oxen mice bird

bull stallion hen rooster

knife saw scissors staple

Next have students think in analogy language.

Example:

Complete the word pairs. On blank a. write two words that will complete the phrase. On blank b. write the word pair in correct analogy form. Then on blank c. give an analogy that is the same as the one given for b.

1. _____ is a baby _____
 - a. fawn is a baby deer
 - b. fawn:deer
 - c. puppy:dog
2. _____ is the opposite of _____
 - a. dark is the opposite of light
 - b. dark:light
 - c. quick:slow
3. _____ is a cause of _____
 - a. pain is a cause of suffering
 - b. pain:suffering
 - c. stress: headaches

Do the rest with the students. Give an example on the board and have them write it in analogy form and then give a similar analogy.

_____ is a stronger word for _____

_____ is famous for _____

_____ is a homonym for _____
_____ is male, _____ is female
_____ is a word describing _____
_____ is/are used to _____
a group of _____ makes up a(n) _____
_____ comes before _____
_____ is a synonym for _____
_____ is a worker found in _____
a(n) _____ uses a(n) _____
_____ is made of _____
A _____ studies _____

Having students think of a sentence for the word pair will help them to recognize the relationship between the words.

Example

Write a sentence that shows the precise relationship between the two words.

Miser: Stingy

A miser is a person who is stingy.

Have students write sentences for the following analogies.

actor: stage

head: helmet

patriotic: country

sticky : glue

grateful : thanks
morsel : quantity
equine : horse
speculation: profit
alias : identity

When students understand the effective use of analogies they will recognize why authors use them to explain new concepts. For example, in How to Build a Long Lasting Fire: Writing Poems from Your Life Carol Morrison uses the analogy of fire starting and maintenance from The Old Farmers' Almanac to relate the concepts of good poetry writing. The steps of writing are clarified by thinking about the techniques behind fire building. Analogies help readers understand new information more completely.

Modeling the Techniques of Skilled Writers

English teachers can use modeling as a technique to familiarize secondary students with sentence structures and word patterns that often confuse less capable readers. To apply modeling, students imitate a variety of different sentence structures that great writers use regularly. This strategy will improve student writing, and it will help readers to recognize that unusual sentence structures in text are only different, not necessarily more difficult. Once young writers experiment with writing complex

sentences, and as they develop analytical vocabulary, they are better able to think critically and word their thoughts with ease and precision. The following examples were from a Rebecca Kaplan presentation.

Example:

Modeling Sentences Illustrating Twentieth Century Prose
Style

Have students identify the patterns the sentences have in common. Then have them write their own sentences modeling this sentence structure.

1. He lay for a quarter of an hour without thinking, lips parted, legs and arms extended, breathing quietly as he gazed at the figures in the wallpaper until they were hidden in darkness.-Saul Bellow

2. One remembers them from another time-playing handball in the playground, going to church, wondering if they were going to be promoted at school. -James Baldwin

3. She was very old and small and she walked slowly in the dark pine shadows, moving a little from side to side in her steps, with the balanced heaviness and lightness of a pendulum in a grandfather clock.- Eudora Welty

4. I was so concerned with myself that I did not notice a Chicano, a middle-aged man dressed in a new

chambray shirt and faded denim pants, studying me.-

Daniel Gaza

5. I sensed a wrongness around me, like an alarm clock that had gone off without being set. -Maya

Angelou

6. His hands were huge and brown from the sun, with white hairs matting on the backs of his fingers.-

Helen Norris

7. Her hair was slicked against her head with a bun in the back, a proper married-lady hairdo. -Mazdae

Hong Kingston

8. He was tall, about fifty, with darkly handsome, almost sinister features: a neatly trimmed mustache hair turning silver at the temples, and eyes so black they were like tinted windows of a sleek limousine- could see out, but you couldn't see in.-

John Berendt

9. At sunset, against the western light, he looked as if he walked on water as he came back, fish and rods slung over his shoulders, stepping along the rock and coral path just inches under the surface of a running tide.- Garrett Hongo

What patterns do these sentences have in common? Explain to the students, if necessary, that the basic sentence structure is simple and all the description is added in phrases. When students experiment with

following these examples they will recognize that it is an effective technique and will often incorporate it into their own writing. Here is another example using adjective clusters:

1. He looked as if he were fourteen or fifteen, frail and willow-wild, in tennis shoes and blue jeans.- Langston Hughes

2. The square chimneys, broken and uneven, looked drunken.- A.J. Cronin

3. Old and crumbling, the squat-built adobe mission of El Tordo sits in a hollow high up near the snow-capped Truchas.- Fray Angelico Chavez

4. One such philanthropic lady, tall, stout, and gigantic, crossed my path and, seeing my poor condition, called out.- Jorge Ulica

5. Wearing the hat, Cress felt just as she had known she would: gentle and frail and drooping.- Jessamyn West

6. Her gray eyes picked out the swaying palms, precise and formal against a turquoise sky.- Marjorie Kinnan Rawlings

Verb Clusters

1. And then the cub saw his mother, the she wolf, the one, crouching down till her belly touched the ground, whimpering, wagging her tail, making peace signs. Jack London

2. Only the two china cups still leaned against the trashcan, awaiting the sanitation truck.-Ewa Zadrzynska

3. They were teenagers in the picture, grinning at the automatic camera they've fed a quarter.-- John Edgar Widemen

4. Last week he did a hundred sit-ups a day, thinking that he could burn those already apparent ripples in his stomach to even deeper ripples, dark ones, so when he went swimming at the canal next summer, girls in cutoffs would notice.- Gary Sotos

5. In the shadows two figures separate, disentangling so abruptly than Regina's tousled long hair catches on the stranger's coat button.--Maria Luisa Bambal

6. Once in her mothers lap she rested content all the way home, sucking her thumb, stroking her nose with the forefinger of the same hand and kneading a corner of her blanket with the three fingers that were left. -- Alice Walker

7. She stayed up in the hills for the rest of the day, sitting on a black lava boulder in the sunshine where she could see for miles all around her. - Leslie Marmon Silko

8. Okoye was a great talker and he spoke for a long time, skirting round the subject and then hitting it finally.- Chinua Achebe

Absolutes

1. Mrs. Koch knitted without looking a fine sweat cooling her brow, her eyes absently retaining a look of gentle attention, as if she had forgotten that she was not listening to someone.- Nadine Gordimer

2 Joe stood up, his fingers clutching the baggage rack above his head. - Toni Morrison

3. He swung open the bathroom cabinet, his drunk hand shoveling and knocking over toothbrushes, shaving cream, half-empty bottles of cologne that he'd always buy and never finish.- Victor Martinez

4. After that we rode on in silence, the traces creaking, the hoofs of the horses clumping steadily in the soft sand, the grasshoppers shrilling from the fields and the cicadas from the trees overhead -E.W. Teale

5. At my back the turntable, shirred, the needle making a dull scrape among the last grooves.- Saul Bellow

6. I could hear voices praising a steaming dark soup brought to the table, voices murmuring politely, Ching! Ching! - Please eat! - Amy Tan

7. Varner looked at him sharply, the reddish eyebrows beetling a little above the hard little eyes.- William Faulkner

8. Then, very afraid, she shook her head warningly and touched her finger to her lips and shook her head again, her eyes pleading with him.- James Clavell

Modeling is an extremely effective technique that will not only improve the quality of student writing, but will also improve reading comprehension as students become more experienced with a variety of sentence structures.

These strategies for close reading of words and sentences should help secondary students to carefully consider an author's reasoning and perspective before making interpretations based on their own belief systems. Precise reading of text requires students to consider each word an author has selected to convey meaning and question the line of reasoning before arriving at their own conclusions.

STRATEGIES: CONNECTING NEW CONCEPTS WITH PRIOR KNOWLEDGE AND TEACHING ACTIVE READING

Helping students with vocabulary, word relationships, and unusual word patterns are only a few of the ways secondary teachers can help students read difficult text critically. An important part of learning is linking new information to what is already known so that it can be absorbed into the thinking processes and understood. Students' ability to make connections can be greatly enhanced through questioning, visual aids, synthesizing related information by researching subject areas, and through a variety of writing activities.

Preparing for Reading

Having students become involved in pre-reading, during reading and post-reading strategies can increase comprehension greatly.

Questioning

Questioning strategies help students to develop and guide their inner voice and improve critical thinking skills. Teach them to ask themselves:

- What might this story (or essay, article, passage) is going to be about?
- What does the title reveal about this story?

- How does this story seem to be organized? What are clues that tell you this?

- Why do you think the author wrote this story? What seems to be its purpose?

- Who are some of the characters (or proper names) in this story? Skim to find some names.

- Are there any new words as you skim through the pages. Does anything about the story look familiar?

Prereading strategies such as questioning help students to stay more focused and goal oriented. Readers need to stop and think about comprehension. If they realize something is unclear they can reread for clarity. Readers who learn to monitor their understanding of text in this way have the ability to assess their reasoning, and interpret the subject matter clearly and accurately. They can reevaluate or reject previously held beliefs that may not have been sound, and see links between ideas. Teachers can model this questioning behavior by asking questions during oral reading anytime that the text is complex or unclear.

Previewing Text

Prereading helps students become familiar with the organization and the content of what they will read. They can begin to form a mental outline so the details they read later will make sense. They will understand the purpose of

the selection and determine what information is most important. It should also help students remember what they have read.

Students should develop the habit of thinking about the title of the piece and examine any bold face print. They should then note any visual aids: graphs, charts, pictures, tables, maps. Finally, they should read the summary and read the end of the chapter questions if there are any.

Skimming

Skimming for information is skill that students must learn to avoid being overwhelmed with information and unable to focus on important details. When a reader skims over the reading selection they are moving their eyes quickly over the piece to identify important information and look for the patterns of organization in the selection. It is important for secondary students to be able to look over reading selections quickly, disregard information that is not significant, and not try to read every word when skimming.

Pre-Writing

There are also writings that students can do prior to reading that will increase interest and involvement in the text. Teachers can pull out major concepts or themes from the reading material and have students do a quickwrite, which is a rough draft that focuses only on their thoughts,

not on the conventions of writing. The quickwrite should stimulate interest in the topic and involve the student by having them consider their feelings on the topic before actually reading the assignment.

Quickwrite

- What: A special kind of writing that uses the act of writing itself to discover what students already know. It works only if they write without planning and without looking back.

- When: To solidify an impression or your thoughts about any subject before, during, or after a learning experience.

- Why: It is a special type of writing that surfaces internal discoveries to provide insight into your own thinking. Writing clarifies thinking.

- How: Students write breathlessly/recklessly/passionately for a given amount of time. They begin by writing 2-3 minute quickwrites and progress to 5-10 minute quickwrites with practice. Students write anything they can think of concerning the topic. If a student reaches a point where she cannot think of anything to write, she repeats the last word until something new comes to mind. Students do not worry about punctuation, spelling, or grammar; they just write.

When the piece of literature is completed, have students look back on the writing they did on the quickwrite and discuss how their exposure to new concepts may have changed or expanded the way they understand things.

Anticipation Guides

Another type of pre-reading activity is an anticipation guide. This is a series of statements or questions related to the information in the reading selection given to students in a quiz format created by the teacher. The anticipation guide is given prior to reading so that students are focused on finding the important concepts in the selection as they read. (For Anticipation Guides, see Appendix D.)

During Reading

When students question their understanding of text while reading, they can check for understanding, reread if necessary, and analyze the author's purpose. Reading actively helps students to focus on relevant facts, clarify new ideas, and consider different points of view. Reflecting on how text is being interpreted during reading allows readers to be aware of their own reasoning processes.

Readers can become directly involved in questioning what they are reading by making predictions. When students pause after reading a portion of the selection to predict

what will happen next, they read more actively, looking for clues to see if their prediction was right.

Readers should be encouraged to write in margins or underline parts of their reading they find important.

Questioning Strategies

Readers ask themselves these questions:

- What is the purpose of this story (or essay, article, passage)?
- What are at least three main ideas in this story?
- What is the author's point of view in this story?
- How is this story organized?
- What are clues that tell me this? Are there words that indicate time, comparison, cause and effect, or story
- What do I think about this story/? Does it make sense to me? Did I understand it? Do I need to go back over anything to understand it better?
- What makes this story good?

Teaching students to think about their own thinking is a strategy that can be used throughout life.

Writing About Text During Reading

Writing is extremely important in increasing reading comprehension in that it forces students to relate to the text directly and examine their thinking closely. Students develop self-discipline when they have to explain their interpretations, analyze carefully, establish criteria for evaluating, and clarify reasoning processes. When students take notes on what they are reading, or outline chapters, they can identify chapter titles, recognize the significance of headings or subtopics, and extract main ideas from the text.

Notetaking

The Cornell note taking process, which is taught in the AVID program, requires readers to question the text in the side margin as they review what they have read. The AVID tutorial worksheet requires students to ask a focus question such as: What is one question you have today about your school work? Students take notes in the specified format and then add a 2 to 3 sentence learning log on the back about what they have learned during tutorial. This system helps students to reflect on their own learning.

Journal Writing

Another way to teach students to focus on learning is by writing journals about the literature they are reading. There are many advantages to having students write dialectical journals.

These journals can engage students, helping them to concentrate on their assigned reading. Students can see that writing can be used as a tool for learning, rather than as a product to be judged. They can see that writing is a way to possess or own new knowledge as they attempt to do interpretive phrasing.

The sharing of the journals in small groups encourages immediate feedback on how students are understanding or not understanding a story. They can learn to appreciate others' points of view as they often see that there are varied interpretations on the same quotes that they select. Student soon realize that they are somewhat in charge of their learning process--before the teacher contributes as a facilitator. Regular practice with the journal promotes higher critical thinking as they discover meaningful connections.

By first individually completing journals and then by sharing them in small groups, students learn to read carefully, to record quotes they have evaluated as pertinent, to summarize, and substantiate their interpretations by referring to their specific notes.

The following descriptions of journals and other writings about literature are from the California Literature Project at Dominguez Hills on July, 1989. This compilation should help teachers to involve students in relating to text through journal writing.

Double Entry/Dialectical Journal

- What: A double-entry record in which the student takes notes and adds his or her own reflections while reading literature. It provides two columns that are in dialogue with each other. The journal provides a non-threatening beginning to writing and promotes writing fluency. Students are encouraged to explore ideas, responses, and to take risks in their writing.

- When: As reader progresses through text.

- Why: To actively involve the reader in making meaning by encouraging interaction with the text. This journal not only develops a method of critical reading but also encourages habits of reflective questioning. The journal creates a visible, permanent record and allows the student to interact personally with literature.

- How: Divide a sheet of paper in half. On the left side, the reader copies a quotation or passage from the text that has been selected by the teacher or the reader. The quotation or passage she finds should be luminous, enlightening, or stimulating. Next to the quotation, the reader should add the page number for future reference purposes. On the right side of the paper, the

reader may respond, question, make personal connections, evaluate, reflect, analyze, or interpret.

Metacognitive Journal

- What: Participant analyzes own thought processes.
- When: Following any activity.
- Why: A higher level of critical thinking occurs when one is aware of one's thought processes. Metacognition encourages the student to reflect on the steps that evolved into the completion of the reading, the final draft of the paper, or the presentation of a project. What enabled the student to gain the most from this experience? What would the student do differently if she had the time to return to the project?
- How: Divide paper in half. On the left side of the paper, the student records What I Learned. On the right side of the paper, the student records How I Came to Learn It.

Learning Log

- What: A general term referring to a written response by participants most commonly used in response to literature but can be used in other content areas. This strategy is not as tied to text

as the double entry journal. The left column entries can be research notes, lecture notes, vocabulary, or questions instead of direct quotations. Right column entries are the student's response, interpretation, or analysis of the left column entries.

- When: When the participants needs to "write to think" "write to learn."

- Why: Allows a personal response to a learning situation. In the right-hand column, the student "owns" the new facts by putting them in his own words or by raising his own questions.

- How: Divide paper in half: Label the left column "Note-Taking," and label the right column "Notemaking." The left column is used for traditional note forms of direct quotations, citations, lecture/discussion notes, vocabulary, questions or summaries. The right column is used for commenting on the left column's notes. As the student keeps taking notes, she should regularly reread his previous page(s) of notes and comments, drawing any new connections in a right column summary before starting another page of note-taking/note-making.

Problem-Solution Journal

- What: Participant identifies a problem, suggests and explores possible solutions.
- When: As problems are encountered.
- Why: To help students develop problem-solving strategies, students will write to describe a problem, discuss it and discover new ways to resolve it in the process.
- How: Divide paper in half. Label the left side "Problem(s)" and label the right column "Resolving the problem(s)." Through writing, the student identifies a problem, brainstorms possible alternatives, chooses a probable solution, anticipates stumbling blocks, and proposes arguments eventually writing in favor of a proposed solution.

Reflective Journal

- What: The student identifies an activity, explains what was learned, and also records a personal response to the activity.
- When: Following an activity worthy of reflection.
- Why: Encourages the student to make connections to her personal life and the human condition.

- How: Divide paper into 3 or more columns. Record "What Happened," "How I Felt," and "What I Learned," OR "What I Did," "What I Learned," "What Questions Do I Still Have?" "What Surprises Did I Experience?" "Overall Response."

Synthesis Journal

- What: The student reflects on cumulative activities in light of her own experience and plans for personal application.

- When: At the end of the week's activities or at the end of a chunk of instruction.

- Why: Encourages the student to review past experiences and plan for future applications. The act of writing reinforces the concepts learned.

- How: Divide paper into sections. Record "What I Did," "What I Learned," and "How I Can Use It."

Speculation About Effects Journal

- What: The student examines events and speculates about the possible long-term effects resulting from these events.

- When: When events occur which may have long-range results.

- Why: To encourage the student to anticipate the changes which might occur based on the events) experienced.

- How: Divide paper in half. On the left side, record "What Happened." On the right, "What Might/Should Happen As a Result of This."

Other Meaning-Making Writing Strategies

Directed Reading Thinking Activity

- What: An on-going process of interaction between the words of the author and the background knowledge of the reader in which the students' attention is focused on a particular purpose for reading the text.

- Why: Allows students to actively seek an understanding of the selection using prior knowledge, textual and/or visual clues to anticipate content and then reading to confirm or reject predictions thus monitoring comprehension.

- How: In drawing, writing, or discussing, students predict what a story will be about based on a portion of the text or on its title alone. They read to verify their hypothesis; they check their comprehension of the selection with their peers and teacher; they predict what may occur next in the story; and the cycle continues.

- When: Before and during the reading of a text.

Reciprocal Teaching

- What: A strategy that teaches students to focus intently on what they are reading by designing and asking questions and summaries.

- Why: Consciously asking questions and summarizing content helps the reader attend deliberately to what is being read.

- How: Both individuals in a pair read a portion of the text. One individual in the pair asks the other questions that came to mind about the reading. These may involve questions directly about the content read, questions related to other lessons or selections, or any that came to mind as the selection was read. The second student answers as many questions as possible. The roles are then reversed with the second student now asking the questions and the first attempting to answer them. At strategic stopping points, the reading stops and one or both of the students summarize what they understand thus far. Teachers need to model the exercise before students attempt this on their own.

- When: At any point during the study of the text.

Transformation (From Genre To Genre)

- What: Rewrite text into a new form.

Examples: Short story to a play, novel to a poem, poem to an essay.

- Why: Deepening of personal meaning from the text.

- How: Model, discuss, write, share.

- When: After reading/study of the text.

Creating Chapter Titles (Synthesis)

- What: Determining the main idea/theme for a portion of text.

- When: Whenever there is a large amount of material to digest in a short amount of time and it is not imperative for each student personally to read all material, use the collaborative technique of JIGSAW.

Synthesis Reporting

- What: Ask the individual to brainstorm ideas, consider the relationships, and report either orally or in writing about the literature being read.

- How: May be introduced individually or in groups. The teacher may ask students to consider

the ideas presented and brainstorm some conclusions either orally or in writing. After individuals discuss, they may want to expand to a class discussion or one-on-one with the teacher.

- Why: In gathering various ideas, students will make conclusions that present a complete picture of the literature just read or being read.

- When: Best presented after having read a work of literature or simply having discussed various ideas. It is best applied when individuals desire to bring ideas together for a semblance of collective meaning.

Summarizing

- What: The encapsulating of what has been presented either orally or in writing.

- How: Teachers may introduce this technique by asking individuals to describe briefly what was said or written. They may do this individually or in groups, orally, or written.

1. Students brainstorm what they read.
2. Irrelevant or unnecessary information is deleted.
3. Teacher and students categorize remaining content.

4. Ideas are subsumed under subordinate headings (categories are labeled).

5. Sentences are written or orally composed to communicate the major category information.

- Why: Summarizing is an excellent means for an individual to recall the major elements in a piece of literature.

- When: Summarizing can be used after reading or discussing ideas, or at the end of a unit of study.

Found Poem

- What: A Found Poem is a collection of luminous words or phrases quoted from a piece of literature. When read aloud, these words or phrases that groups of students have selected from the text form a class FOUND POEM that focuses on the essence of that text.

- When: The Found Poem can be created by students after a piece of text or after an entire text has been read.

- Why: The Found Poem enables individuals, groups, or the entire class to return to the text to focus on those vivid words or phrases used by the author.

- How: Instructor requests groups (at least 3 students per group) of students to look back at the text and to select no more than eight (or so) luminous words or phrases (not sentences or paragraphs) that they feel best communicated the essence of that piece of literature. Allow five minutes for groups to complete. Ask groups to NARROW their selection to NO MORE THAN four words or phrases. After selections are made, the class is instructed to read around from group to group one word or phrase at a time without interruption between groups. Class will have created a Found Poem.

- Who: Individually, in groups, whole class.

There are also assignments that will help students write from literature, not only about literature. Don Gallo suggests having students write newspaper articles about events in literature, letters from one character to another, eulogies, epitaphs, and entry in Who's Who or a letter of recommendation for a job, dialogues written between two characters from different books, a psychiatrist's report or even questionnaire administered to the public about an issue from the book.

All of these writing strategies create deeper involvement with text and allow students to connect what they have read with what they already know. It is important that the reader not only summarize and interpret what the author is saying, but also think about the implications. As students relate new concepts to previously held beliefs they must evaluate if the information is credible, interrelate the new ideas to the knowledge they have, and translate these concepts so they make sense to the reader's understanding of life.

Seeing Connections

One of the most significant ways teachers can foster critical reading skills in secondary students is by helping them to link new information to prior knowledge.

Expanding Knowledge Through Brainstorming

Brainstorming is a technique that is used to help students get down all their thoughts on a subject without establishing relationships between ideas or determining which ideas are of greater importance. The ideas are to be put down quickly without judgement or ranking in importance. It is often easier for secondary students to sort through their thoughts when they see them on paper. They can group the ideas into categories and focus on the concepts that are more developed.

Brainstorming can be used prior to reading to have the students identify their thoughts on a topic before reading. They can then recognize how the author is presenting his or her own views on this topic. It can also be used during or after reading prior to students responding to literature. If students brainstorm before writing about something that they have read, they usually will be able to organize their thoughts more effectively and write more coherently. This will not only improve their writing, but also greatly increase their understanding of the text.

Graphic Organizers

Another way to help students become more involved with text is to have them create visual aids that illustrate different concepts at once and help to organize their thoughts. Graphic organizers are pictures or diagrams that outline key concepts visually so students can make sense of a vast amount of information. These organizers help students to focus on relevant facts, examine them in a variety of ways to analyze different associations and develop their own theories. Fish bone outlines show relationships between ideas and help students to sort things out.

Venn diagrams help readers compare and contrast ideas. These types of visual representations enable secondary students to sort through many thoughts at one time, examine

relationships between ideas, and to further develop the most significant concepts.

Venn Diagram

- What: The VENN DIAGRAM is an organizational device for charting similarities and differences between characters, stories, or other elements.

- When: It is frequently used as a prewriting activity to enable students to organize their thoughts or quotations from text prior to writing a compare/contrast essay or engaging in a discussion.

- Why: This activity enables students to visually organize similarities and differences.

- How: Instruct students to complete the Venn Diagram (two overlapping circles.) They should place their statements or phrases from text in the appropriate area to indicate whether this is a similarity or a difference in the two things being compared. These may be written in note form as an outline to write a paper or in sentence format on chart paper including surrounding illustrations.

- Who: All students can be successful with this activity because it requires a minimum of writing. Groups, partners, or individuals can make diagrams.

Graphic Organizers (See Appendix E)

Concept Mapping

Concept mapping is a technique that involves identifying major ideas in written material, organizing them in a hierarchical arrangement and illustrating the specific relationships between concepts. It is a two-dimensional representation of information that helps students clarify relationships between important ideas. Concept maps help students to link language (concepts from reading) to visual images or diagrams that they create; this will stimulate thinking and enhance memory. Teach students the process of making these maps.

- Step one: Read the chapter title and make a drawing or design.

- Step two: Predict major concepts. Print these and connect them to the topic adding a question mark. This helps students find key concepts as they read. Concepts will be ranked from general to specific.

- Step three: Read the information actively using questioning strategies. Add supporting details to the map and draw lines between them and the major concepts and draw lines between details that are related.

- Step four: Review the map regularly, focusing on major concepts but also reviewing details. Review thoroughly before tests and quizzes.

The concept maps that students create will appear to be different. When grading, be sure the content is valid, the arrangement is from general to specific, and the relationships between the concepts are accurately demonstrated. (See Concept Maps, see Appendix F.)

Teachers can also help students connect new concepts from other subject areas by assigning related reading, linking literature with historical periods, teaching the reading of graphs and charts, and by having students do the mathematical figuring of their grades.

Putting It All Together

When readers complete a selection of text self-questioning will provide clarity and understanding.

Questioning Strategies

Readers should consider:

- What is this story about?
- What are the major events (or points) in the story?
- How are they developed?
- How is the title related to what happens in the story?

- Why did the author write this story?
- Does this story have something important to tell us about life? What are some clues in the story that help you understand it?
- Do the characters, plot, events and setting help clarify the meaning?
- What in this story is like something else you have already known?
- Why is this a good story? What do you like about the characters, events or meaning of the story?

Research

Research papers are an effective way to increase comprehension as students read and synthesize information from various sources on one topic. The students must narrow down their topic, determine what facts are most important to their particular focus, organize their ideas and develop them logically, and record bibliography information in a standard way so that all researchers use the same format. Researching a subject area means the student is well read on this topic and can have the confidence to talk about it with a sense of authority. It requires problem solving and analytical skills to integrate relevant concepts from a variety of disciplines and relate them clearly to others. It also requires critical thinking to reach sound

conclusions based on the information that has been gathered.

Writing After Reading

Other types of writing that enable students to thoroughly analyze what they have read and relate it to their own experience are essay prompts on the topic. Expository writings that require students to support their thoughts on cause-and-effect situations, or to compare and contrast significant concepts, increase comprehension as students clarify their ideas on the text and examine their thinking. Narrative writing can help students to relate the subject to their own experience and to examine a topic from a different perspective. Descriptive essays that require careful observation and specific details help students critically examine text and evaluate whether information has been presented accurately. In persuasive writing students must clarify their position on a subject, support it, refute opposing ideas, and use strong language to support their ideas. Essay structure should be taught so that students recognize thesis statements in introductions, topic sentences in paragraphs, and transitional phrases, which link ideas, and examples or details that support the writer's point.

When students understand that many types of writing are structured in the same way, they learn to look for

patterns of organization in text. When secondary students write about what they are learning, they must think it through and explain it in their own words; writing about what has been read creates a deeper understanding of the material.

These strategies and others that help students to make connections between new ideas and link them to prior knowledge, enable students to find deeper meaning in text. If students monitor their own understanding through self-questioning skills they learn to evaluate their own thoughts and behaviors. As they use graphic organizers and maps they learn to sort information, see relationships between concepts and develop their own theories. Students who understand the limits of their own knowledge, question new concepts and expand their thinking, become independent learners.

STRATEGIES: FINDING RELEVANCE IN TEXT THROUGH SOCIAL INTERACTION, CAREER APPLICATIONS AND CREATIVITY

Motivation to read comes from understanding real world applications. As we progress into the new millenium a vast array of career opportunities are opening for secondary students. The skills that were once stressed in secondary schools are being reevaluated. Dr. Willard Dagget, President of the International Center for Leadership in Education, ranked the skills that the Fortune 500 companies would most like students to possess as they enter the work force. Once at the top of the list were skills such as writing, organization, reading and computation. The skills most valued today by these leading companies are teamwork, problem solving, communication, personal/career skills, and creativity. Projects based on the reading that secondary students do today should have a focus and application that are relevant in order to engage students intellectually and emotionally.

Asking the Right Questions

It is important for readers to be able to get at deep meaning through questioning. This is a skill that must be developed in secondary students. One questioning strategy is based on three topic areas: Matter, Personal Reality, and External Reality. The first area, the matter,

represents the text that is the subject of discussion or questioning. The second area, personal reality, represents the student's own experiences, values, and ideas. The third circle, external reality, is actually "the world": the experience, history, and concepts of other peoples and cultures.

These areas overlap, and are not ordered. The most significant questions come from the area where these three concepts come together. Students who learn to question text by relating it to their own lives as well as to all people in society, can expand their interpretation and find deeper meaning.

Professor Catherine Gannon demonstrated this technique during a discussion about the poem *Cold Snap* by James Hurst.

Example:

Sample Questions from the Three Subject Areas

Matter: What central image, do you think, most reveals how the speaker's words are received?

Personal Reality: How would you define a difficult personal relationship?

External Reality: What part does lack of communication play in relationships?

Questions That Blend Two Topic Areas

Matter/Personal Reality: In what ways are the poem's images appropriate for describing a broken relationship?

Personal Reality/External Reality: How are your personal relationships similar to or different from those of your friends?

Matter/External Reality: How are the poem's images describing a specific incident applicable to a variety of personal relationships?

Sample Question That Interweaves the Three Topic Areas

Matter/Personal Reality/External Reality: Which image in this poem do you think best expresses the complexity of difficult personal relationships?

Students can learn to question text on different levels. Analyzing information in this way helps students to apply new concepts to their lives and expand their thinking. Critical reading requires thoughtful interpretation based on accurate understanding. Questioning analytically is a crucial step in getting at deep levels of meaning.

Collaborative Learning

Having students work together in groups is an effective way to encourage discussion, problem solving and the sharing of ideas. When students learn to listen to one

another they build on the ideas that have been put forth, and are able to go beyond their initial perception. They not only learn to read more carefully and analyze more thoroughly, but to express their own ideas clearly and effectively. Learning to work cooperatively, as a team, is a skill that should be emphasized at the high school level. Group members should have jobs or roles so that the work is divided fairly. Ideally, tasks are divided so group members can work on the type of activity at which they excel.

Collaborative learning encourages students to interact in a positive manner and support one another. Students engaged in their own learning retain information, develop sense of responsibility, and improve in listening, thinking, speaking, and writing skills. Students work in small groups yet each student is responsible for his or her own learning. The students' individual learning is increased as they learn from other's ideas and expand their own thinking.

The teacher's role shifts from the leader to facilitator in a network. The teacher clarifies goals, tasks, and activities. The record/reporter role is rotated among members. A reasonable time limit is established.

Assignments completed individually by students can be shared. Members can work together to study, design, assemble, or create a single project.

Individual assignments that can be shared in small groups include short, written responses to literary selection, creative products such as stories, poems, and essays, research-reference findings, journal-reading log entries, quick-writes, and dialectical journals. Members can work cooperatively to design, assemble, or create a single project such as a dramatic presentation, a visual display, an oral reading, a test-review, a list, brainstorming, problem solving, analyzing a literary selection, evaluating a lesson,

Students can evaluate their work by asking questions such as:

1. Was I an active participant in the group?
2. Did I listen to others ideas?
3. Was I encouraging to group members?
4. Was I effective in the role I had?
5. What new things did I learn?
6. Next time what skills should I work on?

Literature Circles

Collaborative learning in English or social studies classes can be implemented by using the concept literature circles from Harvey Daniels. He suggested that discussion groups work through a piece of literature by examining plot, analyzing characters and identifying major themes.

One major advantage of using literature circles is that the

students control the discussions and therefore they determine what questions must be asked. It is more important for students to learn what to ask, than it is for them to have the right answers to someone else's questions. Working in literature circles gives each student a specific role, and the success of the group is determined by how carefully each member reads and completes their specific task. This activity could easily be adapted to use with expository text in any subject area.

Literature Circles are small discussion groups that meet regularly to share highlights of their reading with peers. They learn to conduct their own wide-ranging, self-sustaining discussions, and have fun sharing ideas on their understanding of the reading.

Although the goal of the assigned roles is to prepare the students for meaningful discussion without role sheets, the role sheets do work well with the middle school student.

Literature Circles were designed to motivate students to read for pleasure. They also prepare students to achieve literacy and intellectual independence. The critical thinking and reading skills that are acquired help to establish the foundation for life long reading.

Each student has a role in the group. Daniels originally suggested having one student lead the discussion, one summarize plot, one make connections to

real world happenings, and one student illustrate important scenes. These roles can be different, but each student needs some specific responsibility. Projects can also be developed for the groups.

Example:

Literature Circle Final Projects for A Separate Peace

1. Working with a group, dramatize a scene from the book. (The trial organized by Brinker would be a good choice.) Feel free to improvise and expand the dialogue, keeping in mind the personalities of the characters.

2. In the story Phineas invented games. Working with your group invent a game of your own. Write down the objectives and rules.

3. Create an impressive time line of the major events of World War II. Consult the proper reference books.

4. The inscription over the main door of the Devon School's First Building, where Phineas and Gene were taken to trial by Brinker Hadley, is "Here Boys Come to Be Made Men." How did those words apply specifically to Gene? Design a logo that includes these words.

5. Create a "story board book" illustrating the main events in the plot and including quotes to go along with the pictures.

Individual Projects:

6. A Poster advertising the book
 7. Read-alouds of key passages (with discussion and commentaries)
 8. Make an impressive time line of the story.
 9. Report on the author's life.
 10. Write a new ending for the book.
 11. Create a collage representing a character.
 12. Artwork: painting, sculpture, poem, mobile - all should be interpreting the book
 13. Create a diary of a character that represents their thoughts and feelings throughout the story.
 14. Write a letter to (or from) a character
 15. Create a board game based on the book.
 16. Make a cross word puzzle based on the characters, setting, and plot of the story.
 17. Make a mural (large painting or sketch on butcher paper) illustrating a scene from the story.
- Group final projects must show contributions from each person. Final projects may be presented to the class. Another example shows how projects can stimulate discussion and learning throughout the study of the novel.

Readers' Circle Activities

Similar to Literature Circles, these Reader's Circle activities promote analytical interpretation of text throughout the reading process. As students work with others they gain new knowledge by considering conflicting interpretations and various points of view. This teamwork helps students to problem-solve together and listen to the ideas of others.

First Fifty Pages

- Create a storyboard -Choose 5 important moments in the story.

- Illustrate these in five consecutive boxes on large paper.

- Beneath each picture, write a key quote to accompany/explain the, illustration.

Be sure to put the title of the book, author and students' names on the chart.

First Half of the Novel

- Create a question web

- On chart paper have students brainstorm all questions they have about the novel.

- Put the book title in the center of the paper and have questions radiate outward as in a spider web.

- After about 10 minutes, have students choose one question that intrigues them and quickwrite on their thinking (They should choose a question they do not

know the answer to and try to see if writing helps them to develop their thinking on this subject.)

-Read these around the group -Turn in these quickwrites stapled to the web

Completed Novel

▪ Class presentation of some aspect of the novel that will make others want to read your book. Possible ways to do this:

- a readers' theater script of an important passage
- a skit of a key scene
- a collage (must be explained orally to the class)
- a movie poster
- a rap about the book
- a panel discussion (Oprah Winfrey show, etc.)
- free choice

As readers learn to question text critically and interpret meaning through examining the implications of the author's words on paper, they become involved with text. This relationship deepens as they apply it to their own understanding of reality and their own experiences. As students share ideas with others they question their own beliefs, learn to support their conclusions, and evaluate other people's reasoning.

Career Applications

High school students become motivated to read critically when they understand the purpose of the reading and can understand how to apply what they have learned.

Analyzing Professional Journals

Analyzing professional journals is an instructional strategy that enables readers to become familiar with the formats of newspapers, magazines and professional journals. Students analyze both articles and advertisements to determine the target audience. They can find copies of articles on the Internet to read and summarize, then work as a group to make a presentation with a slide show or other visuals prepared with the use of technology.

Magazines can include Business Week, Forbes, and Fortune. Newspapers can include the local newspaper and business journals, Wall Street Journal, and the New York Times. Professional journals can include industry and career specific journals such as Progressive Grocer, Department Store Daily, and Service Station Manager.

Example:

Students are given a different magazine, journal, or newspaper every three weeks so that during the year students read and analyze 12 different publications.

Students select co-editors for the class newsletter. During the year, each student will have an opportunity to serve as co-editor for the class newsletter that can be published on the school's Internet WebPages. Class time is used for students to present a short oral report on their publication analysis and article summaries. Students give oral reports on every other written summary for a total of six oral presentations during the year.

Students give oral presentations and work on the newsletter on a regular basis. Assigning points and use of class time will vary, but final assessment is based on the article summaries, oral presentation and newsletter.

This learning strategy is meaningful to students because it prepares them for career options. It allows students to work together analyzing journals with current information so they are developing skills that will help them evaluate a variety of careers, as well as teach analytical reading skills that will keep them better informed throughout life. Reading charts and graphs, finding arguments that are not well supported, analyzing the effect of advertising and the target audience, are all critical reading strategies that make people aware of how others are influencing their thinking.

Writing Business Letters and Resumes

Having students create resumes and cover letters is a way to teach critical reading skills through real life applications. They can use the biography of a famous person in any field of study. The resumes are easy to grade, the cover letter provides excellent practice of business letter format, and the final product is a concise representation of the person's accomplishments. The following information was adapted from a CSUSB career development booklet.

Example:

Resume and Cover Letter Assignment

Have students assume they are the famous people in their biographies and follow these instructions to write a resume and cover letter. A resume is a list of a person's accomplishments written in a specific format. Resumes do not use I, he, or she. They are written only with verbs. The arrangement of information can vary, as can the categories. The following categories are only suggestions.

Education

Professional Experience

Military Service

Achievements

Honors and Awards

Special Attributes

Goals

References

The Purpose of a Resume

A resume is an advertisement designed to make employers want to invite the applicant in for an interview. Consider the target audience carefully.

Gather information by listing experience and accomplishments. For each of these jobs or activities make a note of:

1. The name and address of the employer or organization
2. A title, or a description of involvement.
3. The dates of involvement (From/To)
4. Duties and responsibilities

Think about the target audience and making a positive impression. Find sample resumes to use as guides. The finished resume has a look and a sound to it. It should be formal, factual, and concise. It should look clean on page and be reproduced on a good quality paper.

1. Use resume language: avoid first-person statements. Say 'Taught...' not 'I taught...' Start sentences with action verbs. Paragraphs should be about four typed

lines or less, and verbs should be consistent. (End all in -ing or all in -ed).

2. Type it right. Have the resume typed on a high quality typewriter or a word processor. Have two or three people read it to check for spelling or grammatical errors. Correct them.

3. Have it copied. Take the final, perfect copy to someone who can make very clean, good copies on a high quality paper (20 pound non-glare). Most quick print places have paper recommended for resumes, so ask them what they recommend. Use white or light-colored paper unless you are trying to project an offbeat image.

Don't forget to buy some extra paper and envelopes to match to mail cover letters and resumes that are compatible.

Cover letter

Write a cover letter using the Sample Letter of Application. Assume the famous person in the biography is applying for a job. Before sending a resume a cover letter should be written. Make up a fictitious company, a job and a person that might be offering that position. The cover letter is addressed to someone at the company that is offering the job, and it states what position is available. The placement of the addresses, headings, paragraphs and closing must be identical to the sample letter. Watch punctuation!

If this person were actually looking for a job, when a position is advertised, he or she would first call the company personnel office and ask what department the position is offered in, and who is interviewing or hiring. The next step is to adapt the letter carefully to conditions of the job opportunity so that the person's qualifications meet the conditions of the job objective.

FIRST PARAGRAPH

Arouse interest. Open with an idea that captures attention and states the person's strongest selling point. State why he or she is writing, name the position or type of work for which he/she is applying and mention how he/she heard of the opening or organization.

The opening and closing paragraphs are the key points of the cover letter. The opening must convince the prospective employer that the whole letter and the resume enclosed are worth reading.

MIDDLE PARAGRAPH

Explain why he/she is interested in working for this company and specify your reasons for desiring this type of work. If the person in the biography has had relevant work experience or related education, be sure to point it out, but do not reiterate the entire resume.

Request an interview and indicate when he/she will call for an appointment. Close the letter with a request for action. "I will call your office the week of the 10th to inquire about an interview." Or, "I would appreciate an opportunity to meet with you to discuss our mutual interest. I will call your office next week to arrange a convenient time." NEVER "Please feel free to call me. Put address and phone number in cover letter in the event that the resume gets separated from it. (For Resume and Cover Letter, see Appendix H.)

This type of activity makes sense to secondary students as they can see a practical application for their reading. The ability to write error free business letters and powerful resumes takes practice. Students must read critically to find all relevant information for the resume, and must be able to transform it into an effective format. High school students are more likely to be motivated and enthusiastic about reading assignments when they know they can directly apply what they are learning to their lives.

Understanding Logical Reasoning

It is necessary for students to realize that not everything they read contains sound logic. One way to have

secondary students closely examine the reasoning of others is to teach them fallacies of logic.

Logic Fallacies

Teaching secondary students to read analytically requires that they understand logical reasoning and be alerted to fallacies in thinking especially when reading argumentation. Reading selections that contain logic flaws often sound reasonable.

Example:

- In the logic flaw Argument to the Man, an idea is attached to a particular person. If the person is disreputable, the writer assumes the idea will be rejected. If the person is respected, the idea will be accepted.

- Flaws concerning Authenticity of Sources present an idea as an absolute truth and admit no other possibilities or inaccurate sources are presented. Students must learn to check sources because they generally believe what they read.

- Begging the Question is when the writer bases his or her argument on a generalization that may not be true.

- In a False Analogy the writer compares two ideas or situations and assumes that because

they are alike in some ways they are alike in all ways.

- In a Hasty Generalization the writer draws a conclusion from too little evidence.

- Sometimes writers use Ignoring the Question to bring up other issues and divert attention from the real question.

- In an All or Nothing fallacy, the writer suggests that there are only two possible solutions to a problem, when actually there are probably several.

- In Mistaken Causal Relationship the writer indicates that one event is the result of the other simply because it follows it in time, or the writer uses an inference for a logically sound conclusion. It is called a non sequitur, "it does not follow" logically.

- Overgeneralization means the writer assumes an idea applies much more generally than his or her facts warrant. It is similar to the hasty generalization, in which the writer generalizes too soon, usually by jumping to a conclusion without going through all the necessary steps of presenting a logical argument.

- Stereotyping means the writer tries to win the support of the reader by appealing to generally held beliefs whether they can be validated or are simply unfounded generalizations or prejudices.

Flaws in logic need to be defined and discussed, and the students given opportunities to work through a number of examples as a group so they know that when they encounter poor reasoning it is not an isolated instance and may be intentional.

In English classes students can look for poor reasoning in literature and plays such as Twelve Angry Men. Or, have students to look for examples of logic flaws in newspapers and magazine writing, clip them, and bring them to class for a bulletin board. As students see more and more examples of poor reasoning they will learn to read critically.

Debate

Using strategies developed for public speaking and debate is another way to encourage students to read critically, analyze thoroughly, and support their ideas with evidence and sound reasoning.

Oral communication skills are vitally important for high school students who will soon be preparing to enter

the job market. Using debate, or sparring, in the classroom gives students a purpose for researching various topics, practice analyzing and organizing information, the ability to see both sides of an argument, and the ability to speak effectively and persuasively. First help the students become familiar with the terminology.

Example:

Speech Vocabulary

forum- a discussion with audience participation (they discuss, ask questions, and give opinions)

symposium- a moderator introduces the subject, the speakers speak (usually prepared speeches), and the moderator concludes

public interview- a question and answer session in which a panel interviews one or two guests

panel discussion- the members of the panel interact face to face on a give and take basis

debate- to discuss the reasons for and against the proposition

proposition- a statement of what the debate will cover

affirmative case- the arguments that support the debate proposition (the case for)

negative case- the arguments that oppose the debate proposition (the case against)

case- the principle line of reasoning used to establish a conclusion

issues- the arguments that support your case

brief- an outline of both sides of the issues

refute- to show it is wrong or incorrect

rebuttal- to try to disprove the argument from the other side

conclusion- the summarizing of the main issues leading to the final result or outcome

The following information on SPARING was provided by John Cardoza at a presentation on Oral Communication across the Curriculum.

SPAR (Spontaneous Argumentation)

1. PURPOSE:

a. To introduce students to various oral communication skills within a non-threatening, enjoyable structure.

b. To utilize oral communication across the curriculum in an integrated learning approach to classroom studies.

c. To provide the teacher with instant feedback about skills and concepts which have been learned/need to be learned by the students.

2. STRUCTURE:

a. SPAR is based on a formal, competitive interscholastic Debate structure- students will uphold either side (affirmative or negative) of a given

proposition within established time limits and following a certain speaking order.

b. Flexibility is the key to successful use of SPAR.

Depending upon the particular lesson, classroom composition and time constraints, a session of SPAR can take any number of forms. The teacher should always feel comfortable in rearranging, restructuring, or redirecting the conduct of a SPAR session.

c. The usual structure is as follows:

Prescription Time: The speakers are presented the proposition and given time to prepare their arguments.

First Affirmative Presentation

First Negative Presentation

Cross-examination Time:

The speakers are allowed to question each other about their presentations.

Affirmative Response- the speaker presents a response or refutation to the negative arguments.

Negative Response- the speaker presents a response or refutation to the affirmative arguments.

Affirmative Review- the speaker presents a summary of the affirmative position.

Negative Review in which the speaker presents a summary of the negative position.

3. PROPOSITIONS:

a. Once again, the key to choice of propositions is flexibility and creating a non-threatening environment.

b. Review Propositions. Almost any subject can be used.

4. ORGANIZATION OF SPEECHES

a. Provide students with a clear rubric for judging the debate.

b. Insist that every speech follow a clear organizational pattern.

I. Introduction

A. Thesis (proposition to be defended)

B. Preview of arguments

II. Body

A. First Argument

1. explain

2. analyze

3. apply

B. Second Argument

C. Third Argument.

III. Conclusion

A. Review of supporting points

B. Restatement of Thesis

C. There are various methods of organizing the "body" part of the speech. They can be arranged

chronologically, thematically or topically.

When students interact in this way they evaluate arguments, consider various perspectives, and re-evaluate their own beliefs. Verbalizing ideas requires students to speak thoughtfully, synthesize new information into their arguments, and determine valid criteria for evaluation. Critical reading becomes essential when others are questioning and refuting interpretations from text.

Socratic Seminars

Using Socratic Seminars is another way to teach students to read critically through the use of thoughtful and rigorous dialogue. Students use questioning to explore concepts from text. Jennee Gossard provided the following information on Socratic Seminars in School Change Programs at a University of California at Irvine Writing Conference.

Socratic Seminars are designed to teach participants to examine their own reasoning instead of looking for a right answer. Students will work to understand complex issues through thoughtful dialogue while examining their own ideas and values, and supporting them.

In Socratic Seminars students learn to synthesize knowledge with skills in order to construct new meaning.

Three-Stage Seminar Process

STAGE ONE: Preparing the Text

1. Reading for Literal Meaning

a. Read the piece aloud. Students follow along, underlining whatever that they don't understand.

b. After the reading, briefly discuss their questions about literal meanings, facts or events in the piece. Deal with unfamiliar vocabulary in context.

2. Close Reading of the Text

a. Show a transparency of the first page of the text. Read each paragraph aloud asking for their comments, questions, or responses to the passage.

b. Write their comments, questions, and responses on the transparency. Students mark their own copies.

c. Students continue close reading on their own or with a partner, paragraph by paragraph, writing in their own questions and comments. As they finish early, have them write discussion questions on the back of the text.

STAGE TWO: Socratic Seminar

1. Move tables and chairs into a circle- this is essential.

2. Ask an opening question to begin the conversation.

A good opening question is one you are genuinely curious about, has no single 'right' answer, and is

likely to elicit multiple points of view among the group.

3. As students respond, ask follow-up questions to help them clarify their ideas. During the conversation many of their own questions from the close reading will naturally arise.

4. Set aside a 10-minute period at the end for students to ask their own questions and lead the conversation.

STAGE THREE:

Seminar Reflection/Critique

1. Take time to reflect formally on the seminar process. Ask students to write one sentence for each of the following elements, telling what they observed during the seminar: What did you observe (notice, hear, see) about

- a) Yourself?
- b) Other participants?
- c) The leader?
- d) The process?

2. Ask students to select one observation to share with the whole group. Do a whip around the circle to allow everyone to state his or her observation (it's OK to pass). Discuss issues arising from the critique.

This type of dialogue teaches students to be willing to take risks, to find evidence in the text to support their interpretations and to have the courage to stand up for their beliefs. It also teaches them to really listen to the reasoning of their classmates, to synthesize information, to evaluate a variety of interpretations, and to clearly communicate their conclusions. Socratic seminars help students develop standards for criteria for evaluating many possible interpretations, require precise, thoughtful reading, and expand students' understanding of text.

Encouraging Creativity

Secondary students should be encouraged to express themselves in unique ways. Projects on assigned readings that encourage creative responses stimulate students and develop critical thinking. Students compare and contrast a variety of problem-solving strategies, sort information, go beyond interpreting text to finding meaningful applications. They learn to be flexible and imaginative. Creative thinking enables students to use precise, accurate understanding of text to develop new ideas. They must be able to explain how they took the basic information and created something new from it. Being open to questioning teaches students to clarify their ideas, question their own reasoning, synthesize ideas and defend their conclusions.

Incorporating creative projects into the curriculum appeals to all the different learning styles. Linguistic learners, those who process information by listening, enjoy activities such as word games, crossword puzzles, and story telling. Logical mathematical learners enjoy looking for patterns, categorizing and problem solving; activities for this type of learners would involve lessons using computers, strategy games, inquiry lessons, logic puzzles and math problem solving. Intrapersonal learners enjoy independent study and research while interpersonal learners enjoy group work, and projects that include much social interaction. Spatial learners think in images; these learners enjoy drawing, painting, sculpting, creating videos, working with maps, charts and diagrams. Those who are musical learners enjoy lyrics, poetry and dance. Bodily kinesthetic learners work well with manipulatives, role-playing, competitive games, labs or any other form of hands-on learning.

A choice of creative lessons and projects inspire secondary students to work to their fullest potential.

Example

I. Type of acceptable projects: (choose one from entire list)

A. MAPS - CHARTS - GRAPHS (12" x 16" or larger):

1. Physical Map. (showing mountains, hills, plains, plateaus, rivers, forest, oceans, lakes, etc.).

2. Political Map. (showing cities, national boundaries, etc.).

3. Special Purpose Map.

- a. Population map
- b. Product map
- c. Ethnic/tribe/group
- d. Climate map
- e. Vegetation
- f. Other kind

4. Salt & Flour Map. Use #1 & #2 above. No larger than 12" x 16.11 Shows physical relief. Have key and correct colors (see room map for code).

5. Chart/Graph. Shows some aspect of chapter/lesson assigned.

6. Other kind of map: string, rug, rock, pillow, etc.

B. ART/CRAFT. (NO commercially made items and/or kits.)

1. Model. Show structures, buildings, monuments, and landmarks. NO sugar cubes or kits.

2. Mobile. Show products, landmarks, food, clothing, and people. NO coat hangers or sticks.

3. Collages. Show landmarks, people, clothing, places, products, and artifacts.

4. Drawing/painting. Water colors, oils, felt pen, etc.

C. GAMES - PUZZLES.

1. Board Game. Using cards/dice with information about subject.

2. Puzzle Game. Using pieces when put together form subject.

D.REPORT. In blue or black ink. MUST have title page, table of contents, bibliography. Length: three to five pages. Do not use the textbook for a reference.

E. ACTING. See Teacher

Creative assignments allow students to problem-solve using their imaginations and teach them to be open to new ideas. These projects often bring in knowledge from other disciplines. Students learn to use all that they know and develop confidence in their own abilities.

Secondary students today search for meaning in all that they are learning and look for real world applications. When students create resumes on famous people in any field of study, they are learning skills they will use in the future. Analyzing professional journals focuses on career goals so students will have realistic expectations about the requirements training and experience that will be necessary for the career of their choice. Debates, discussion, mock trials teach students terminology and procedures that are effective for careful understanding of text as well as verbal communication skills. Teaching critical reading helps students to read insurance forms,

legal documents, and technical journals. It prepares students to be informed voters and active participants in society.

Secondary teachers today need to help students be prepared for future careers. If business leaders expect students to exit high school with the ability to work well in teams, have confidence in their problem solving skills, communicate effectively and be imaginative, it is essential that they first are able to read critically. Students will readily acquire these career skills if they first learn to closely examine words and sentence structure in text, distinguish fact from opinion, analyze key assumptions, evaluate and sort information, support ideas with evidence, be open to conflicting ideas, and have the confidence to stand up for their own beliefs. Critical reading is the basis for all higher level thinking.

CONCLUSION

Although this paper cannot include all strategies that increase reading comprehension and higher level thinking, it attempts to link research findings with actual classroom practices and activities. Secondary teachers should not expect students to make meaning from the text without any assistance. Difficult vocabulary, complex new concepts and a vast amount of information can be overwhelming for young people who may not have the necessary support to be successful. Teachers who help students learn how to relate to text critically enable them to become independent thinkers.

When secondary students are taught specific strategies to help them decipher difficult text, they gain self-confidence in their own ability. Students need to learn skills to tackle unfamiliar words and use dictionaries effectively so that precise meaning in text is understood. They need to know exactly what is being asked of them when they are asked to think critically on tests. Students need to recognize signal words that clarify how text is organized so that they can think logically about the information that is presented and identify relevant issues. To avoid passive reading, it is necessary to analyze and question precise details from the text so that interpretations and conclusions are logical and can be substantiated.

Deeper analysis and understanding of text comes from making connections to prior knowledge and seeing relationships between various pieces of information. Strategies that help students create mental scaffolding, such as graphic organizers, concept mapping and brainstorming, enable students to recognize important facts, set aside insignificant details, see relationships between ideas, and understand information in many different ways. The ability to question and analyze relevant information allows for critical thinking. Students who learn to question, and do their own reasoning based on careful examination of text, come to logical conclusions and develop their own theories. They become independent thinkers who are not easily manipulated by the opinions of others.

When students write down their thoughts about text in journals and essays they can see things from different perspectives, and evaluate their own thoughts and behaviors as well as others'. As they question and try to explain how they interpret what they have read, they will relate it to their own experience, bring together vital concepts, and possibly think differently about what they know. Knowledge and insight come from making connections between different subjects, analyzing information from different perspectives, and developing ideas fully. As students explain their thinking in writing, they expand what they

know to include new information, question their understanding, examine new ideas critically, ponder their implications and anticipate consequences. When students determine for themselves how different views can be reconciled they can integrate new ideas into their thinking, and learn to support their own ideas with support based on relevant information. Sometimes secondary students don't really know what they know until they have to explain it in writing.

Critical thinking involves a conscious awareness of one's thinking processes. Students need to monitor how information is being interpreted, determine what is relevant and what is less significant, back up reasoning with solid support, and come to their own conclusions based on careful examination and integration of information.

Many people today are looking for cures for public education. Americans want more young people to graduate from high school. These graduates are expected to be critical thinkers and citizens who will be actively involved in their communities. Secondary teachers must help students acquire the skills that will make them successful not only throughout high school, but throughout life.

Appendix A- Greek and Latin Roots

	ROOT	MEANING	WORDS	NEW ENTRIES
<input checked="" type="checkbox"/>	acer, acid, acri	<i>bitter, sour, sharp</i>	acerbic, acidity (sourness), acrid, acrimony	
<input checked="" type="checkbox"/>	acu	<i>sharp</i>	acute, acupuncture	
<input checked="" type="checkbox"/>	ag, agi, ig, act	<i>do, move, go</i>	agent (doer), agenda (things to do), agitate, navigate (move by sea), ambiguous (going both ways, action	
<input checked="" type="checkbox"/>	ali, allo, alter	<i>other</i>	alias (a person's other name), alibi, alien (from another place), alloy, alter (change to another form)	
<input checked="" type="checkbox"/>	altus	<i>high, deep</i>	altimeter (a device for measuring heights), altitude	
<input checked="" type="checkbox"/>	am, amor	<i>love, liking</i>	amiable, amorous, enamored	
<input checked="" type="checkbox"/>	anni, annu, enni	<i>year</i>	anniversary, annually (yearly), centennial (occurring once in 100 years)	
<input checked="" type="checkbox"/>	anthrop	<i>man</i>	anthropology (study of mankind), misanthrope (hater of mankind), philanthropy (love of mankind)	
<input checked="" type="checkbox"/>	antico	<i>old</i>	antique, antiquated, antiquity	
<input checked="" type="checkbox"/>	arch	<i>chief, first, rule</i>	archangel (chief angel), architect (chief worker), archaic (first; very early), monarchy (rule by one person), matriarchy (rule by the mother)	
<input checked="" type="checkbox"/>	aster, astr	<i>star</i>	aster (star flower), asterisk, asteroid, astronomy (star law), astronaut (star traveler; space traveler)	
<input checked="" type="checkbox"/>	aud, aus	<i>hear, listen</i>	audible (can be heard), auditorium, audio, audition, auditory, audience, auscultate	
<input checked="" type="checkbox"/>	aug, auc	<i>increase</i>	augur, augment (add to; increase), auction	
<input checked="" type="checkbox"/>	auto, aut	<i>self</i>	automobile (self-moving vehicle), autograph (self-writing), automatic (self-acting), autobiography, author	
<input checked="" type="checkbox"/>	belli	<i>war</i>	rebellion, belligerent (warlike or hostile), bellicose	
<input checked="" type="checkbox"/>	biblio	<i>book</i>	Bible, bibliography (writing, list of books), bibliomania (craze for books), bibliophile (book lover)	

	ROOT	MEANING	WORDS	NEW ENTRIES
<input checked="" type="checkbox"/>	acer, acid, acri	<i>bitter, sour, sharp</i>	acerbic, acidity (sourness), acrid, acrimony	
<input checked="" type="checkbox"/>	acu	<i>sharp</i>	acute, acupuncture	
<input checked="" type="checkbox"/>	ag, agi, ig, act	<i>do, move, go</i>	agent (doer), agenda (things to do), agitate, navigate (move by sea), ambiguous (going both ways, action	
<input checked="" type="checkbox"/>	ali, allo, alter	<i>other</i>	alias (a person's other name), alibi, alien (from another place), alloy, alter (change to another form)	
<input checked="" type="checkbox"/>	altus	<i>high, deep</i>	altimeter (a device for measuring heights), altitude	
<input checked="" type="checkbox"/>	am, amor	<i>love, liking</i>	amiable, amorous, enamored	
<input checked="" type="checkbox"/>	anni, annu, enni	<i>year</i>	anniversary, annually (yearly), centennial (occurring once in 100 years)	
<input checked="" type="checkbox"/>	anthrop	<i>man</i>	anthropology (study of mankind), misanthrope (hater of mankind), philanthropy (love of mankind)	
<input checked="" type="checkbox"/>	antico	<i>old</i>	antique, antiquated, antiquity	
<input checked="" type="checkbox"/>	arch	<i>chief, first, rule</i>	archangel (chief angel), architect (chief worker), archaic (first; very early), monarchy (rule by one person), matriarchy (rule by the mother)	
<input checked="" type="checkbox"/>	aster, astr	<i>star</i>	aster (star flower), asterisk, asteroid, astronomy (star law), astronaut (star traveler; space traveler)	
<input checked="" type="checkbox"/>	aud, aus	<i>hear, listen</i>	audible (can be heard), auditorium, audio, audition, auditory, audience, auscultate	
<input checked="" type="checkbox"/>	aug, auc	<i>increase</i>	augur, augment (add to; increase), auction	
<input checked="" type="checkbox"/>	auto, aut	<i>self</i>	automobile (self-moving vehicle), autograph (self-writing), automatic (self-acting), autobiography, author	
<input checked="" type="checkbox"/>	belli	<i>war</i>	rebellion, belligerent (warlike or hostile), bellicose	
<input checked="" type="checkbox"/>	biblio	<i>book</i>	Bible, bibliography (writing, list of books), bibliomania (craze for books), bibliophile (book lover)	

	ROOT	MEANING	WORDS	NEW ENTRIES
<input checked="" type="checkbox"/>	clud, clus, claus	shut	include (to take in), conclude, recluse (one who shuts himself away from others), claustrophobia (abnormal fear of being shut up, confined)	
<input checked="" type="checkbox"/>	cognosc, gnosi	know	recognize (to know again), incognito (not known), prognosis (forward knowing), diagnosis	
<input checked="" type="checkbox"/>	cord, cor, cardi	heart	cordial (hearty, heartfelt), concord, discord, courage, encourage (put heart into), discourage (take heart out of), core, coronary, cardiac	
<input checked="" type="checkbox"/>	corp	body	corporation (a legal body), corpse, corpulent	
<input checked="" type="checkbox"/>	cosm	universe, world	cosmos (the universe), cosmic, cosmonaut, microcosm, cosmopolitan (world citizen), macrocosm	
<input checked="" type="checkbox"/>	crat, cracy	rule, strength	democratic, autocracy	
<input checked="" type="checkbox"/>	crea	create	creature (anything created), recreation, creation, creator	
<input checked="" type="checkbox"/>	cred	believe	creed (statement of beliefs), credo (a creed), credence (belief), credit (belief, trust), credulous (believing too readily, easily deceived), incredible	
<input checked="" type="checkbox"/>	cresc, cret, crease, cru	rise, grow	crescendo (growing in loudness or intensity), concrete (grown together, solidified), increase, decrease, accrue (to grow)	
<input checked="" type="checkbox"/>	crit	separate, choose	critical, criterion (that which is used in choosing), hypocrite	
<input checked="" type="checkbox"/>	cur, curs	run	current (running or flowing), concurrent, concur (run together, agree), incur (run into), recur, occur, courier, precursor (forerunner), cursive	
<input checked="" type="checkbox"/>	cura	care	curator, curative, manicure (caring for the hands)	
<input checked="" type="checkbox"/>	cycl, cyclo	wheel, circular	Cyclops (a mythical giant with one eye in the middle of his forehead), unicycle, bicycle, cyclone (a wind blowing circularly; a tornado)	
<input checked="" type="checkbox"/>	deca	ten	decade, decalogue, decathlon	

	ROOT	MEANING	WORDS	NEW ENTRIES
<input type="checkbox"/>	dem	<i>people</i>	democracy (people-rule), demography (vital statistics of the people), epidemic (on or among the people)	
<input type="checkbox"/>	dent, dont	<i>tooth</i>	dental (relating to teeth), denture, dentifrice, orthodontist	
<input type="checkbox"/>	derm	<i>skin</i>	hypodermic (injected under the skin), dermatology (skin study), epidermis (outer layer of skin), taxidermy (arranging skin; mounting animals)	
<input type="checkbox"/>	dict	<i>say, speak</i>	diction, dictionary, dictate, dictator, dictatorial, edict, predict, verdict, contradict, benediction	
<input type="checkbox"/>	doc	<i>teach</i>	indoctrinate, document, doctrine	
<input type="checkbox"/>	domin	<i>master</i>	dominate, dominion, predominant, domain	
<input type="checkbox"/>	don	<i>give</i>	donate, condone	
<input type="checkbox"/>	dorm	<i>sleep</i>	dormant, dormitory	
<input type="checkbox"/>	dox	<i>opinion, praise</i>	doxy (belief, creed, or opinion), paradox (contradictory), orthodox (having the correct, commonly accepted opinion), heterodox (differing opinion)	
<input type="checkbox"/>	drome	<i>run, step</i>	syndrome (run together; symptoms), hippodrome (a place where horses run)	
<input type="checkbox"/>	duc, duct	<i>lead</i>	induce (lead into, persuade), seduce (lead aside), produce, reduce, aquaduct (water leader or channel), viaduct, conduct, conduit, subdue	
<input type="checkbox"/>	dura	<i>hard, lasting</i>	durable, duration, endurance	
<input type="checkbox"/>	dynam	<i>power</i>	dynamo (power producer), dynamic, dynamite, hydrodynamics	
<input type="checkbox"/>	endo	<i>within</i>	endoral (within the mouth), endocardial (within the heart), endoskeletal	
<input type="checkbox"/>	equi	<i>equal</i>	equinox, equilibrium	
<input type="checkbox"/>	erg	<i>work</i>	energy, erg (unity of work), allergy, ergophobia (morbid fear of work), ergometer	
<input type="checkbox"/>	fac, fact, fic, fect	<i>do, make</i>	factory (place where workmen make good things of various kinds), fact (a thing done), manufacture, amplification, confection	
<input type="checkbox"/>	fall, fals	<i>deceive</i>	fallacy, falsify	

	ROOT	MEANING	WORDS	NEW ENTRIES
<input type="checkbox"/>	fer	<i>bear, carry</i>	ferry (carry by water), coniferous (bearing cones, as a pine tree), fertile (bearing richly), defer, infer, refer	
<input checked="" type="checkbox"/>	fid, fide, feder	<i>faith, trust</i>	confidante, Fido, fidelity, confident, infidelity, infidel, federal, confederacy	
<input checked="" type="checkbox"/>	fila, fili	<i>thread</i>	filament (a threadlike conductor heated by electrical current), filter, filet, filibuster, filigree	
<input type="checkbox"/>	fin	<i>end, ended, finished</i>	final, finite, finish, confine, fine, refine, define, finale	
<input checked="" type="checkbox"/>	fix	<i>fix</i>	fix, fixation (the state of being attached), fixture, affix, prefix, suffix	
<input checked="" type="checkbox"/>	flex, flect	<i>bend</i>	flex (bend), reflex (bending back), flexible, flexor (muscle for bending), inflexibility, reflect, deflect	
<input type="checkbox"/>	flu, fluc, fluv	<i>flowing</i>	influence (to flow in), fluid, flue, flush, fluently, fluctuate (to wave in an unsteady motion)	
<input checked="" type="checkbox"/>	form	<i>form, shape</i>	form, uniform, conform, deform, reform, perform, formative, formation, formal, formula	
<input type="checkbox"/>	fort, forc	<i>strong</i>	fort, fortress (a strong point), fortify (make strong), forte (one's strong point), fortitude	
<input checked="" type="checkbox"/>	fract, frag	<i>break</i>	fracture, infraction, fragile (easy to break), fraction (result of breaking a whole into equal parts), refract (to break or bend)	
<input checked="" type="checkbox"/>	gam	<i>marriage</i>	bigamy (two marriages), monogamy, polygamy	
<input checked="" type="checkbox"/>	gastr(o)	<i>stomach</i>	gastric, gastronomic, gastritis (stomach inflammation)	
<input checked="" type="checkbox"/>	gen	<i>birth, race, produce</i>	genesis (birth, beginning), genetics (study of heredity), genealogy (lineage by race, stock), generate, genetic	
<input checked="" type="checkbox"/>	geo	<i>earth</i>	geometry (earth measurement), geography (earth-writing), geocentric (earth-centered), geology	
<input checked="" type="checkbox"/>	germ	<i>vital part</i>	germination (to grow), germ (seed; living substance, as the germ of an idea), germane	

	ROOT	MEANING	WORDS	NEW ENTRIES
<input type="checkbox"/>	gest	<i>carry, bear</i>	gestation, congestive (causing clogging), congest (bear together, clog)	
<input type="checkbox"/>	gloss, glot	<i>tongue</i>	glossary, polyglot (many tongues), epiglottis	
<input type="checkbox"/>	glu, glow	<i>lump, bond, glue</i>	agglutinate (make to hold in a bond), conglomerate (bond together)	
<input type="checkbox"/>	grad, gress	<i>step, go</i>	grade (step, degree), gradual (step-by-step), graduate (make all the steps) graduated (in steps or degrees), progress	
<input type="checkbox"/>	graph, gram	<i>write, written</i>	graph, graphic (written; vivid), autograph (self-writing, signature) photography (light-writing), graphite (carbon used for writing), phonograph (sound-writing), bibliography, telegram, diagram	
<input type="checkbox"/>	grat	<i>pleasing</i>	congratulate (express pleasure over success), gratuity (mark of favor), grateful, ingrate (not thankful)	
<input type="checkbox"/>	grav	<i>heavy, weighty</i>	grave, gravity, aggravate, gravitate	
<input type="checkbox"/>	greg	<i>herd, group, crowd</i>	gregarian (belonging to a herd), congregation (a group functioning together), segregate (tending to group aside or apart)	
<input type="checkbox"/>	helio	<i>sun</i>	heliograph (an instrument for using the sun's rays to send signals), heliotrope (a plant that turns to the sun)	
<input type="checkbox"/>	hema, hemo	<i>blood</i>	hemorrhage (a flowing of blood), hemoglobin, hemophilia	
<input type="checkbox"/>	here, hes	<i>stick</i>	adhere, cohere, cohesion	
<input type="checkbox"/>	hetero	<i>different</i>	heterogeneous (different in birth), heterosexual (with interest in the opposite sex)	
<input type="checkbox"/>	homo	<i>same</i>	homogeneous (of same birth or kind), homonym (word with same name or pronunciation as another), homogenize	
<input type="checkbox"/>	hum, human	<i>earth, ground, man</i>	humus, exhume (to take out of the ground), humane (compassion for other humans)	

	ROOT	MEANING	WORDS	NEW ENTRIES
<input type="checkbox"/>	hydr, hydra, hydro	<i>water</i>	dehydrate (to take water out of; dry), hydrant (water faucet), hydraulic, hydrogen, hydrophobia (fear of water)	
<input type="checkbox"/>	hypn	<i>sleep</i>	hypnosis, Hypnos (god of sleep), hypnotherapy	
<input type="checkbox"/>	ignis	<i>fire</i>	ignite, ignition, igneous	
<input type="checkbox"/>	ject	<i>throw</i>	deject, inject, project (throw forward), eject, object	
<input type="checkbox"/>	join, junct	<i>join</i>	adjoining, enjoin (to lay an order upon; to command), juncture, conjunction, injunction	
<input type="checkbox"/>	juven	<i>young</i>	juvenile, rejuvenate (to make young again)	
<input type="checkbox"/>	lau, lav, lot, lut	<i>wash</i>	launder, lavatory, lotion, ablution (a washing away), dilute (to make a liquid thinner and weaker)	
<input type="checkbox"/>	leg	<i>law</i>	legal (lawful; according to law), legislate (to enact a law), legislature, legitimize (to make legal)	
<input type="checkbox"/>	levi	<i>light</i>	alleviate (lighten a load), levitate, levity (light conversation; humor)	
<input type="checkbox"/>	liber, liver	<i>free</i>	liberty, liberal, liberalize (to make more free), deliverance	
<input type="checkbox"/>	liter	<i>letters</i>	literary (concerned with books and writing), literature, literal, alliteration, obliterate	
<input type="checkbox"/>	loc, loco	<i>place</i>	locality, locale, location, allocate (to assign; to place), relocate, locomotion	
<input type="checkbox"/>	log, logo, ology	<i>word, study, speech</i>	catalogue, prologue, dialogue, logogram (a symbol representing a word), zoology (animal study), psychology (mind study)	
<input type="checkbox"/>	loqu, locut	<i>talk, speak</i>	eloquent (speaking well and forcefully), loquacious (talkative), colloquial (talking together; conversational or informal), soliloquy, locution	
<input type="checkbox"/>	luc, lum, lus, lun	<i>light</i>	translucent (letting light come through), lumen (a unit of light), luminary (a heavenly body; someone who shines in his profession), Luna (the moon goddess)	

	ROOT	MEANING	WORDS	NEW ENTRIES
<input type="checkbox"/>	magn	<i>great</i>	magnify, magnificent, magnanimous (great of mind or spirit), magnate, magnitude, magnum	
<input type="checkbox"/>	man	<i>hand</i>	manual, manage, manufacture, manacle, manicure, manifest, maneuver, emancipate	
<input type="checkbox"/>	mand	<i>command</i>	mandatory (commanded), remand (order back), mandate	
<input type="checkbox"/>	mania	<i>madness</i>	monomania (mania on one idea), kleptomania, pyromania, maniac	
<input type="checkbox"/>	mar, mari, mer	<i>sea, pool</i>	marine (a sailor serving on shipboard), marsh (wetland, swamp), maritime (relating to the sea or navigation), mermaid	
<input type="checkbox"/>	matri	<i>mother</i>	matrimony (state of wedlock), matriarchate (rule of women), maternal, matron	
<input type="checkbox"/>	medi	<i>half, middle, between, halfway</i>	mediate (come between, intervene), medieval (pertaining to the Middle Ages), mediterranean (lying between lands), mediocre, medium	
<input type="checkbox"/>	mega	<i>great</i>	megaphone, megalopolis, megacycle (a million cycles)	
<input type="checkbox"/>	mem	<i>remember</i>	memo (a reminder), memento commemoration (the act of remembering by a memorial or ceremony), memoir, memorable	
<input type="checkbox"/>	meter	<i>measure</i>	meter (metric measurement), barometer, thermometer	
<input type="checkbox"/>	micro	<i>small</i>	microscope, microfilm, microwave, micrometer (device for measuring small distances), micron (a millionth of a meter), microbe	
<input type="checkbox"/>	migra	<i>wander</i>	migrate, emigrant (one who leaves a country), immigrate (to come into the land to settle)	
<input type="checkbox"/>	mit, miss	<i>send</i>	emit (send out, give off), remit (send back), submit, admit, commit, permit, transmit, omit, intermittent (sending between, at intervals), mission, missile	
<input type="checkbox"/>	mob, mot, mov	<i>move</i>	mobile (capable of moving), motionless (without motion), motor, emotional (moved by feelings), motivate, demote promotion	

	ROOT	MEANING	WORDS	NEW ENTRIES
<input type="checkbox"/>	mon	<i>warn. remind</i>	monitor, monument (reminder of a person or event), premonition, admonish	
<input type="checkbox"/>	mor, mort	<i>mortal. death</i>	mortal, immortal (not subject to death), mortality (rate of death), mortician, mortuary	
<input type="checkbox"/>	morph	<i>form</i>	amorphous (with no form), metamorphosis (a change of form), morphology	
<input type="checkbox"/>	multi	<i>many. much</i>	multifold, multilingual (one who speaks many languages), multiped (organism with many feet), multiply	
<input type="checkbox"/>	nat, nasc	<i>to be born. to spring forth</i>	innate (inborn), natal, native, nativity	
<input type="checkbox"/>	neur	<i>nerve</i>	neuritis (inflammation of a nerve), neuropathic (having a nerve disease), neurologist, neural, neurosis, neurotic	
<input type="checkbox"/>	nom	<i>law. order</i>	autonomy (self-law), astronomy, gastronomy, economy	
<input type="checkbox"/>	nomen, nomin	<i>name</i>	nomenclature, nominate	
<input type="checkbox"/>	nov	<i>new</i>	novel (not formerly known), renovate (to make like new again), novice, innovate	
<input type="checkbox"/>	nox, noc	<i>night</i>	nocturnal, equinox (equal nights)	
<input type="checkbox"/>	numer	<i>number</i>	numeral, numeration (act of counting), enumerate (count out), innumerable	
<input type="checkbox"/>	omni	<i>all. every</i>	omnipotent (all-powerful), omniscient (all-knowing), omnipresent, omnivorous	
<input type="checkbox"/>	onym	<i>name</i>	anonymous, pseudonym (false name), antonym (against name; word of opposite meaning), synonym	
<input type="checkbox"/>	oper/opu	<i>work</i>	operate (to labor; function), cooperate, opus (a musical composition or work)	
<input type="checkbox"/>	ortho	<i>straight. correct</i>	orthodox (of the correct or accepted opinion), orthopedic (originally pertaining to straightening a child), unorthodox, orthodontist	
<input type="checkbox"/>	pac	<i>peace</i>	pacifist (opposed to war), pacify (make peace, quiet), Pacific Ocean (peaceful ocean)	

	ROOT	MEANING	WORDS	NEW ENTRIES
<input type="checkbox"/>	pan	<i>all</i>	Pan-American, panacea (cure-all), pandemonium (place of all the demons; wild disorder), pantheon (place of all the gods in mythology)	
<input type="checkbox"/>	pater, patr	<i>father</i>	paternity, patriarch (head of the tribe or family), patriot, patron (wealthy person who supports as would a father)	
<input type="checkbox"/>	path, pathy	<i>feeling, suffering</i>	pathos (sorrow), sympathy, antipathy (feeling against), apathy (without feeling), empathy (feeling or identifying with another), telepathy (far feeling; thought transference)	
<input type="checkbox"/>	ped, pod	<i>foot</i>	pedal, impede (get the feet in a trap; hinder), pedestal, pedestrian, centipede, tripod, podiatry (care of the feet), antipodes (opposite feet)	
<input type="checkbox"/>	pedo	<i>child</i>	orthopedic, pedagogue (child leader), pediatrics (medical care of children)	
<input type="checkbox"/>	pel, puls	<i>drive, urge</i>	compel, dispel, expel, repel, propel, pulse, impulse, pulsate, compulsory, expulsion, repulsive	
<input type="checkbox"/>	pend, pens, pond	<i>hang, weigh</i>	pendant, pendulum, suspend, appendage, pensive (weighing thought)	
<input type="checkbox"/>	phil	<i>love</i>	philosophy (love of wisdom), philanthropy, philharmonic, bibliophile, Philadelphia (city of brotherly love)	
<input type="checkbox"/>	phobia	<i>fear</i>	claustrophobia, acrophobia (fear of high places), aquaphobia (fear of water)	
<input type="checkbox"/>	phon	<i>sound</i>	phonograph, phonetic, symphony (sounds together)	
<input type="checkbox"/>	photo	<i>light</i>	photograph, photogenic, photosynthesis	
<input type="checkbox"/>	plac, plais	<i>please</i>	placid (calm, peaceful), placebo, placate, complacent	
<input type="checkbox"/>	plu, plur, plus	<i>more</i>	plural (more than one), pluralist (one who holds more than one office), plus	
<input type="checkbox"/>	pneuma, pneumon	<i>breath</i>	pneumatic (pertaining to air, wind, or other gases), pneumonia (disease of the lungs)	

	ROOT	MEANING	WORDS	NEW ENTRIES
<input type="checkbox"/>	poli	<i>city</i>	metropolis (mother city; main city), police, politics, Acropolis (high city, upper part of Athens), Indianapolis	
<input type="checkbox"/>	pon, pos, pound	<i>place, put</i>	postpone (put afterward), component, opponent (one put against), proponent, expose, impose, deposit, posture (how one places oneself), position, expound	
<input type="checkbox"/>	pop	<i>people</i>	population, populous (full of people), popular	
<input type="checkbox"/>	port	<i>carry</i>	porter (one who carries), portable, transport (carry across), report, export, import, support, transportation	
<input type="checkbox"/>	portion	<i>part, share</i>	portion, proportion (the relation of one share to others)	
<input type="checkbox"/>	prehend	<i>seize</i>	apprehend (seize a criminal), comprehend (seize with the mind), comprehensive (seizing much)	
<input type="checkbox"/>	prim, prime	<i>first</i>	primacy (state of being first in rank), prima donna (the first lady of opera), primitive (from the earliest or first time), primary, primal, primeval	
<input type="checkbox"/>	proto	<i>first</i>	prototype (the first model made), protocol, protagonist, protozoan	
<input type="checkbox"/>	psych	<i>mind, soul</i>	psyche, psychiatry (healing of the mind), psychology, psychosis (serious mental disorder), psychotherapy (mind treatment), psychic	
<input type="checkbox"/>	punct	<i>point, dot</i>	punctual (being exactly on time), punctuation, puncture, acupuncture	
<input type="checkbox"/>	reg, recti	<i>straighten</i>	regiment, regular, rectify (to make straight), correct, direct, rectangle	
<input type="checkbox"/>	ri, ridi, risi	<i>laughter</i>	deride (mock; jeer at), ridicule (laughter at the expense of another), ridiculous, derision	
<input type="checkbox"/>	rog, roga	<i>ask</i>	prerogative (privilege; asking before), interrogation, derogatory	
<input type="checkbox"/>	rupt	<i>break</i>	rupture, interrupt, abrupt (broken off), disrupt (break apart), erupt (break out), incorruptible (unable to be broken down)	
<input type="checkbox"/>	sacr, sanc, secr	<i>sacred</i>	sacrosanct, sanction, consecrate, desecrate	

	ROOT	MEANING	WORDS	NEW ENTRIES
<input type="checkbox"/>	salv, salu	safe, healthy	salvation (act of being saved), salvage, salutation	
<input type="checkbox"/>	sat, satis	enough	satiate (giving pleasure), saturate, satisfy (to give as much as is needed)	
<input type="checkbox"/>	sci	know	science (knowledge), conscious (knowing, aware), omniscient (knowing everything)	
<input type="checkbox"/>	scope	see, watch	telescope, microscope, kaleidoscope (instrument for seeing forms), periscope, stethoscope	
<input type="checkbox"/>	scrib, script	write	scribe (a writer), scribble, inscribe, describe, subscribe, prescribe, manuscript (written by hand)	
<input type="checkbox"/>	sed, sess, sid	sit	sediment (that which sits or settles out of a liquid), session (a sitting), obsession (an idea that sits stubbornly in the mind), possess, preside, president, reside, subside	
<input type="checkbox"/>	sen	old	senior, senator, senile	
<input type="checkbox"/>	sent, sens	feel	sentiment, consent, resent, dissent, sentimental, sense, sensation, sensitive, sensory, dissension	
<input type="checkbox"/>	sequ, secu, sue	follow	sequence, sequel, consequence, subsequent, prosecute, consecutive, second (following first), ensue, pursue	
<input type="checkbox"/>	serve	save, serve	servant, subservient, servitude, preserve, conserve, reservation, service, conservation, observe, deserve	
<input type="checkbox"/>	sign, signi	sign, mark, seal	signal (a sign to call attention), signature, design, insignia (identifying marks), significant	
<input type="checkbox"/>	simil, simui	like, resembling	similar (resembling in many respects), assimilate (to make similar to), simile, simulate	
<input type="checkbox"/>	sist, sta, stit	stand	assist (to stand by with help), persist (stand firmly; unyielding; continue) circumstance, stamina (power to withstand, to endure), status, state, static, stable, stationary, substitute (to stand in for another)	
<input type="checkbox"/>	solus	alone	solo, soliloquy, solitaire, solitude	

	ROOT	MEANING	WORDS	NEW ENTRIES
<input type="checkbox"/>	solv, solu	<i>loosen</i>	solvent (a loosener), solve, absolve (loosen from, free from), resolve, soluble, solution, resolution, resolute, dissolute (loosened morally)	
<input type="checkbox"/>	somnus	<i>sleep</i>	insomnia, somnambulist (a sleepwalker)	
<input type="checkbox"/>	soph	<i>wise</i>	sophomore (wise fool), philosophy, sophisticated (world wise)	
<input type="checkbox"/>	spec, spect, spic	<i>look</i>	specimen, specific, spectator, spectacle, aspect, speculate, inspect, respect, prospect, retrospective, introspective, expect, conspicuous	
<input type="checkbox"/>	sphere	<i>ball, sphere</i>	stratosphere (upper portion of the atmosphere), hemisphere (half of the earth), spheroid	
<input type="checkbox"/>	spir	<i>breath</i>	spirit (breath), conspire (breathe together; plot), inspire (breathe into), aspire (breathe toward), expire (breathe out; die), perspire, respiration	
<input type="checkbox"/>	string, strict	<i>draw tight</i>	stringent, restrict, constrict (draw tightly together), boa constrictor (snake that constricts its prey)	
<input type="checkbox"/>	stru, struct	<i>build</i>	construe (build in the mind, interpret), structure, construct, instruct, obstruct, destruction, destroy	
<input type="checkbox"/>	sume, sump	<i>take, use, waste</i>	consume (to use up), assume, presumption (to take or use before knowing all the facts)	
<input type="checkbox"/>	tact, tang, tag, tig, ting	<i>touch</i>	tactile, contact, intact (untouched), intangible, tangible, contagious (able to transmit disease by touching), contiguous, contingency	
<input type="checkbox"/>	tele	<i>far</i>	telephone (far sound), telegraph, telegram, telescope, television, telecast, telepathy (far feeling)	
<input type="checkbox"/>	tempo	<i>time</i>	temporary, contemporary (those who live at the same time), extemporaneously, pro tem (for the time being)	

	ROOT	MEANING	WORDS	NEW ENTRIES
<input type="checkbox"/>	ten, tin, tain	<i>hold</i>	tenacious (holding fast), tenant, tenure, untenable, detention, retentive, content, pertinent, continent, obstinate, contain, abstain, pertain, detain	
<input type="checkbox"/>	tend, tent, tens	<i>stretch, strain</i>	tendency (a stretching; leaning), extend, intend, contend, pretend, tender, extent, tension, pretense	
<input type="checkbox"/>	terra	<i>earth</i>	terrain, terrarium, territory, terrestrial	
<input type="checkbox"/>	test	<i>to bear witness</i>	testament (a will; bearing witness to someone's wishes), detest, attest, testimony	
<input type="checkbox"/>	the, theo	<i>God</i>	monotheism (belief in one god), polytheism, atheism, theology	
<input type="checkbox"/>	therm	<i>heat</i>	thermometer, therm (heat unit), thermal, thermos bottle, thermostat, hypothermia (subnormal temperature)	
<input type="checkbox"/>	thesis, thet	<i>place, put</i>	antithesis (place against), hypothesis (place under), synthesis (put together) epithet	
<input type="checkbox"/>	tom	<i>cut</i>	atom (not cutable; smallest particle of matter), appendectomy, tonsillectomy, dichotomy (cutting in two; a division) anatomy	
<input type="checkbox"/>	tort, tors	<i>twist</i>	torture (twisting to inflict pain), retort (twist back, reply sharply), extort, distort, contort	
<input type="checkbox"/>	tox	<i>poison</i>	toxic (poisonous), intoxicate, antitoxin	
<input type="checkbox"/>	tract, tra	<i>draw, pull</i>	tractor, attract, subtract, tractable (can be handled), abstract (to draw away)	
<input type="checkbox"/>	trib	<i>pay, bestow</i>	tribute (to pay honor to), contribute, attribute, retribution, tributary	
<input type="checkbox"/>	turbo	<i>disturb</i>	turbulent, disturb, turbid, turmoil	
<input type="checkbox"/>	typ	<i>print</i>	type, prototype, typical, typography, typewriter, typology, typify	
<input type="checkbox"/>	ultima	<i>last</i>	ultimate, ultimatum (final or last offer that can be made)	
<input type="checkbox"/>	uni	<i>one</i>	unicorn, unify (make into one), university, unanimous, universal	
<input type="checkbox"/>	vac	<i>empty</i>	vacate, vacuum, evacuate, vacation, vacant	

CLUES TO 100,000 WORDS

<i>Prefix</i>	<i>Its Other Spellings</i>	<i>Its Meaning</i>	<i>Master Words</i>	<i>Root</i>	<i>Its Other Spellings</i>	<i>Its Meaning</i>
1. de	—	down, away	<i>detain</i>	tain	ten, tin	to have, to hold
— 2. inter-	—	between	<i>intermittent</i>	mitt	miss, mis, mit	to send
— 3. pre-	—	before	<i>precept</i>	cept	cap, capt, ceiv, cip, ceit	to take, to seize
4. ob-	oc-, of-, op-	to, toward, against	<i>offer</i>	fer	lat, lay	to bear, to carry
5. in-	il-, im-, ir-	into	<i>insist</i>	sist	sta	to stand, incur, persist
6. mono-	—	one, alone	<i>monograph</i>	graph	—	to write
7. epi-	—	over, upon, beside	<i>epilogue</i>	log	ology	speech, science
8. ad-	a-, ac-, af-, ag-, al-, an-, ap-, ar-, as-, at-	to, towards	<i>aspect</i>	spect	spec, spi, spy	to look
9. un- com-	— co-, col- con-, cor-	not with, together	<i>uncomplicated</i>	plic	play, plex, ploy, ply	to fold, bend, twist, interweave
10. non- ex-	— e-, ef-	not out, formerly	<i>nonextended</i>	tend	tens, tent	to stretch
11. re- pro-	— —	back, again forward, in favor of	<i>reproduction</i>	duct	duc, duit, duk	to lead, make, shape, fashion
12. in- dis-	il-, im- ir di-, dif-	not apart from	<i>indisposed</i>	pos	pound, pon, post	to put
13. sub-	suc-, suf- sug-, sup- sur-, sus-	under	<i>oversufficient</i>	fic	fac, fact, fash, fest	to make, to do
14. mis- trans-	— tra-, trand	wrong(ly) across, beyond	<i>mistranscribe</i>	scribe	scrip, scriv	to write

Copyright © 1984 by Allyn and Bacon, Inc. Reproduction of this material is restricted to use with *A Guidebook for Teaching Writing in Content Areas* by Sherry Hill Howie.

Appendix B- Word Maps

WORD PART MAPS

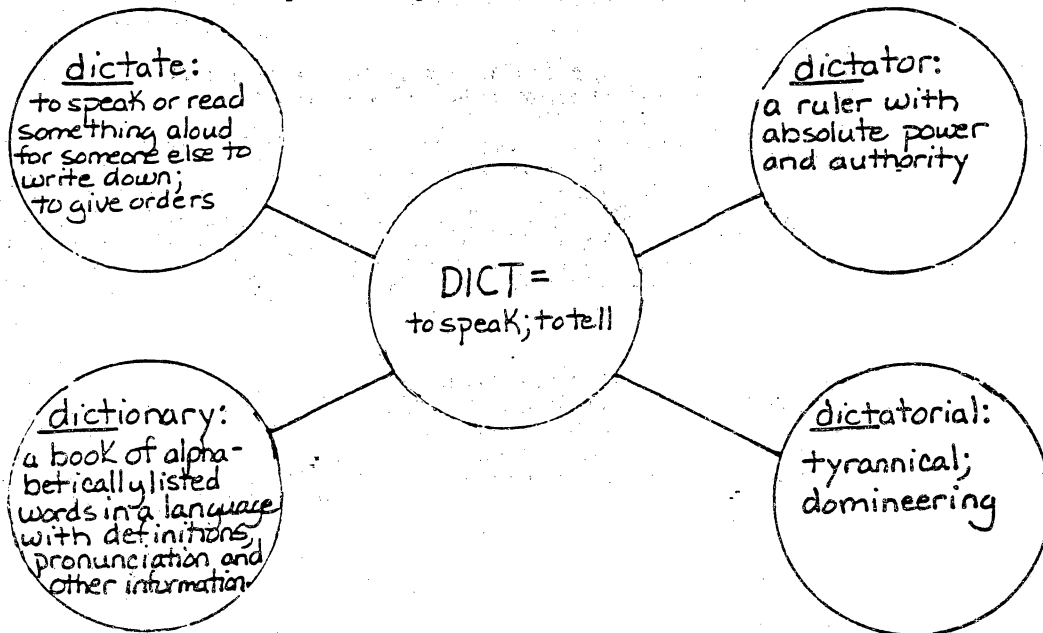
One way to learn the Greek and Latin word parts in the charts would be to memorize them from the charts. This, however, is probably not the most efficient study method. You can transfer the word parts to your long-term memory and recall them more easily if you apply one or more of the principles of learning: You can associate them with something you already know, organize the information into categories, or visualize the information in some kind of picture form.

One method of associating new information with prior learning is using a word part map. In word part maps, visualizing relationships between the words can make it easier for the mind to organize the information and to remember it.

To create a word part map, follow these steps:

1. Write the word you want to learn in the center of a piece of paper.
2. Group related words around it. Use related words you already are familiar with, but feel free to add any new related words you might find in the dictionary.
3. This grouping will resemble a cluster or the spokes of a wheel. Try to branch off from the focal point as much as possible.

Here is a sample word part map:



Appendix C- Vocabulary Cards

A VOCABULARY STUDY CARD

new word →

related →
word forms

Illiterate, adj.

literate, adj.
literacy, n.
illiteracy, n.

← part of speech

1. "But many U.S. illiterates are immigrants from cultures where education wasn't available or was denied."	← original context
2. not literate; unable to read and write.	← dictionary definition
3. "About half the population is still illiterate."	← dictionary example
4. My grandmother is functionally illiterate in English because she immigrated to the U.S. at age 70 and is afraid to go to school.	← student's own sentence with new word

Appendix D- Anticipation Guide

Introductory Note: Paule Marshall is a novelist who was born in Brooklyn in 1929, the daughter of immigrants from Barbados, West Indies. In her essay "The Poets in the Kitchen," excerpted here, she attributes her appreciation of language to long-ago conversations in her mother's kitchen.

The Poets in the Kitchen

I grew up among poets. Now they didn't look like poets -- whatever that breed is supposed to look like. Nothing about them suggested that poetry was their calling. They were just a group of ordinary housewives and mothers, my mother included, who dressed in a way (shapeless housedresses, dowdy felt hats and long, dark, solemn coats) that made it impossible for me to imagine they had ever been young.

Nor did they do what poets were supposed to do -- spend their days in an attic room writing verses. They never put pen to paper except to write occasionally to their relatives in Barbados. "I take my pen in hand hoping these few lines will find you in health as they leave me fair for the time being," was the way their letters invariably began. Rather, their day was spent "scrubbing floor," as they described the work they did.

Several mornings a week these unknown bards would put an apron and a pair of old house shoes in a shopping bag and take the train or streetcar from our section of Brooklyn out to Flatbush. There, those who didn't have steady jobs would wait on certain designated corners for the white housewives in the neighborhood to come along and bargain with them over pay for a day's work cleaning their houses. This was the ritual even in the winter.

Later, armed with the few dollars they had earned, which in their vocabulary became "a few raw-mouth pennies," they made their way back to our neighborhood, where they would sometimes stop off to have a cup of tea or cocoa together before going home to cook dinner for their husbands and children.

The basement kitchen of the brownstone house where my family lived was the usual gathering place. Once inside the warm safety of its walls the women threw off the drab coats and hats, seated themselves at the large center table, drank their cups of tea or cocoa, and talked. While my sister and I sat at a smaller table over in a corner doing our homework, they talked -- endlessly, passionately, poetically, and with impressive range. No subject was beyond them. True, they would indulge in the usual gossip: whose husband was running with whom, whose daughter looked slightly "in the way" (pregnant) under her bridal gown as she walked down the aisle. That sort of thing. But they also tackled the great issues of the time. They were always, for example, discussing the state of the economy. It was the mid and late 30's then, and the aftershock of the Depression, with its soup lines and suicides on Wall Street, was still being felt.

There was no way for me to understand it at the time, but the talk that filled the kitchen those afternoons was highly functional. It served as therapy, the cheapest kind available to my mother and her friends. Not only did it help them recover from the long wait on the corner that morning and the bargaining over their labor, it restored them to a sense of themselves and reaffirmed their self-worth. Through language they were able to overcome the humiliations of the work day.

Name _____ Date _____ Per _____

**Anticipation/Reaction Guide
Poets in the Kitchen**

Directions:

A.1. Before reading: Check **AGREE** or **DISAGREE** for each of the following statements in the left-hand column.

B.1. After reading: Re-read your list and check **AGREE** or **DISAGREE** for each of the following statements in the right-hand column.

<u>AGREE</u>	<u>DISAGREE</u>	<u>Statement</u>	<u>AGREE</u>	<u>DISAGREE</u>
_____	_____	1. Immigrants from the 1930s had an easier lifestyle than immigrants of today.	_____	_____
_____	_____	2. Written stories are more important than stories that are oral (spoken).	_____	_____
_____	_____	3. Conversations with family and friends lead to a healthy attitude about life.	_____	_____
_____	_____	4. America offers immigrants many jobs that pay well.	_____	_____
_____	_____	5. Waiting on certain streets for work is a new approach in finding employment.	_____	_____
_____	_____	6. Americanized children of immigrants don't appreciate the values, language and customs of their parents.	_____	_____
_____	_____	7. Immigrants feel that America's protective laws are positive and easy to follow.	_____	_____
_____	_____	8. Writers are only inspired by other professional writers.	_____	_____

Templates for Graphic Organizers

Advance Organizer

Fishbone

Venn Diagram

Double Bubble

Two-Tier Cluster

Word Map

Two Way Data Chart

K-W-L Chart

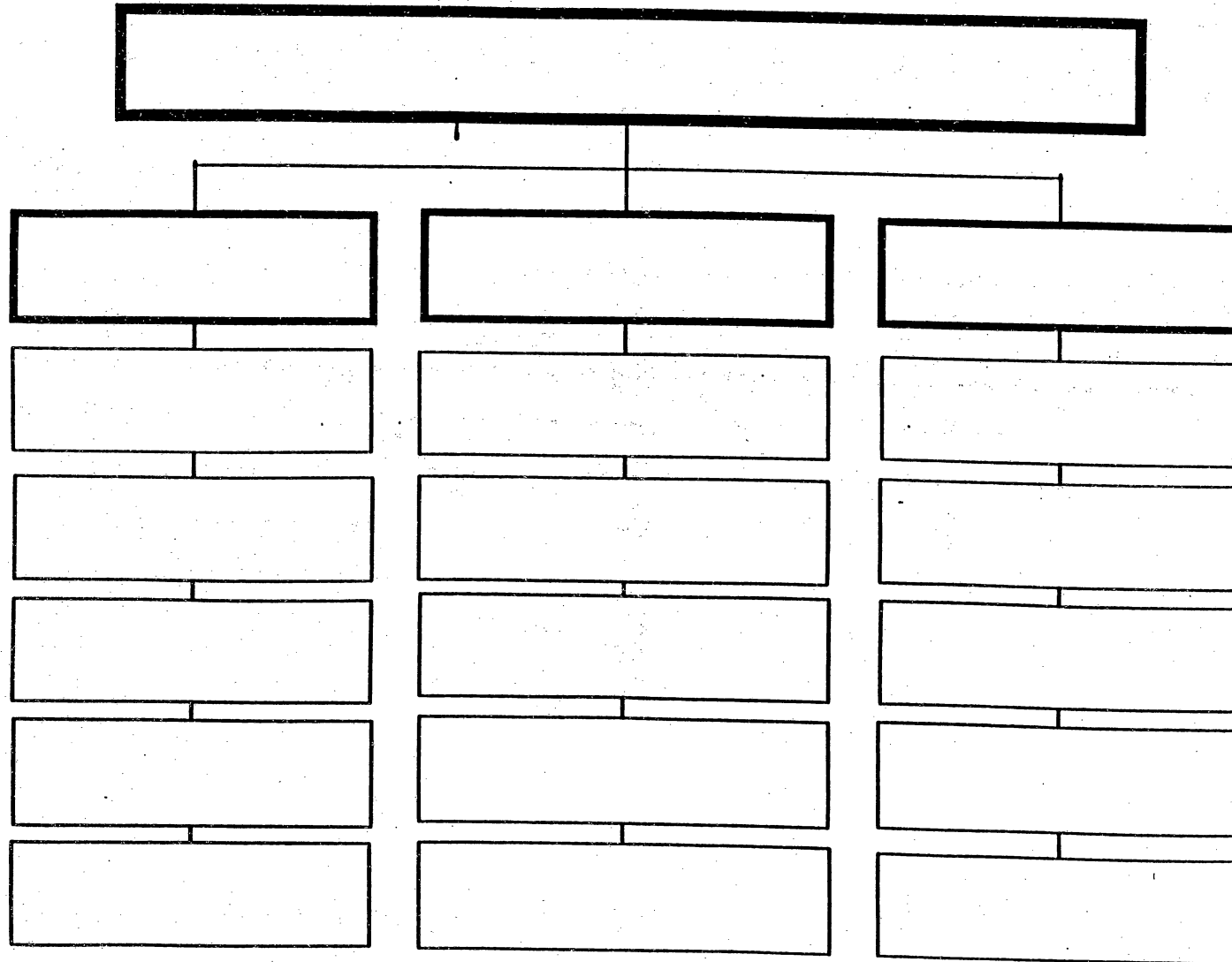
Divided Page

Double Entry Journal

Reflective Journal

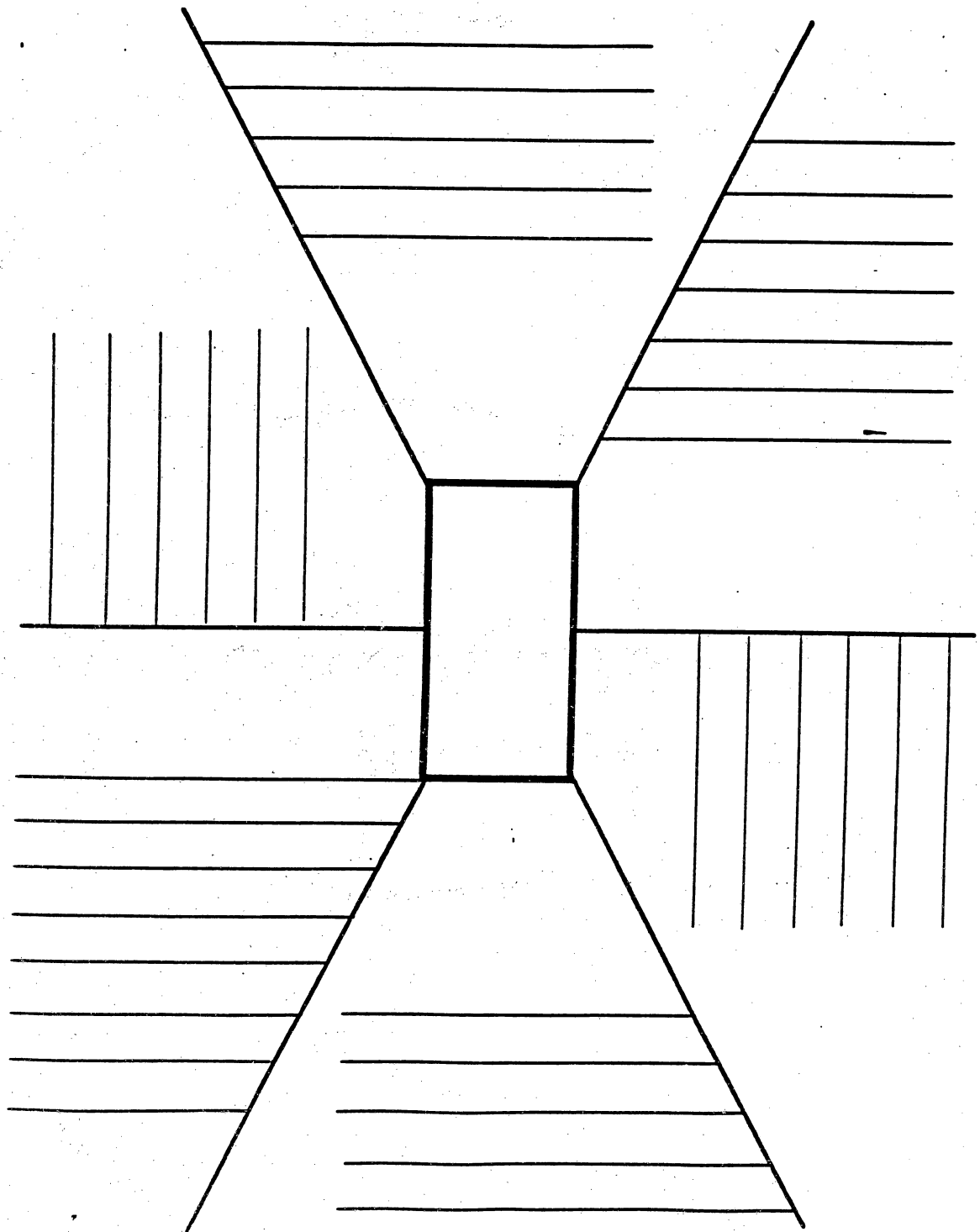
Pyramid

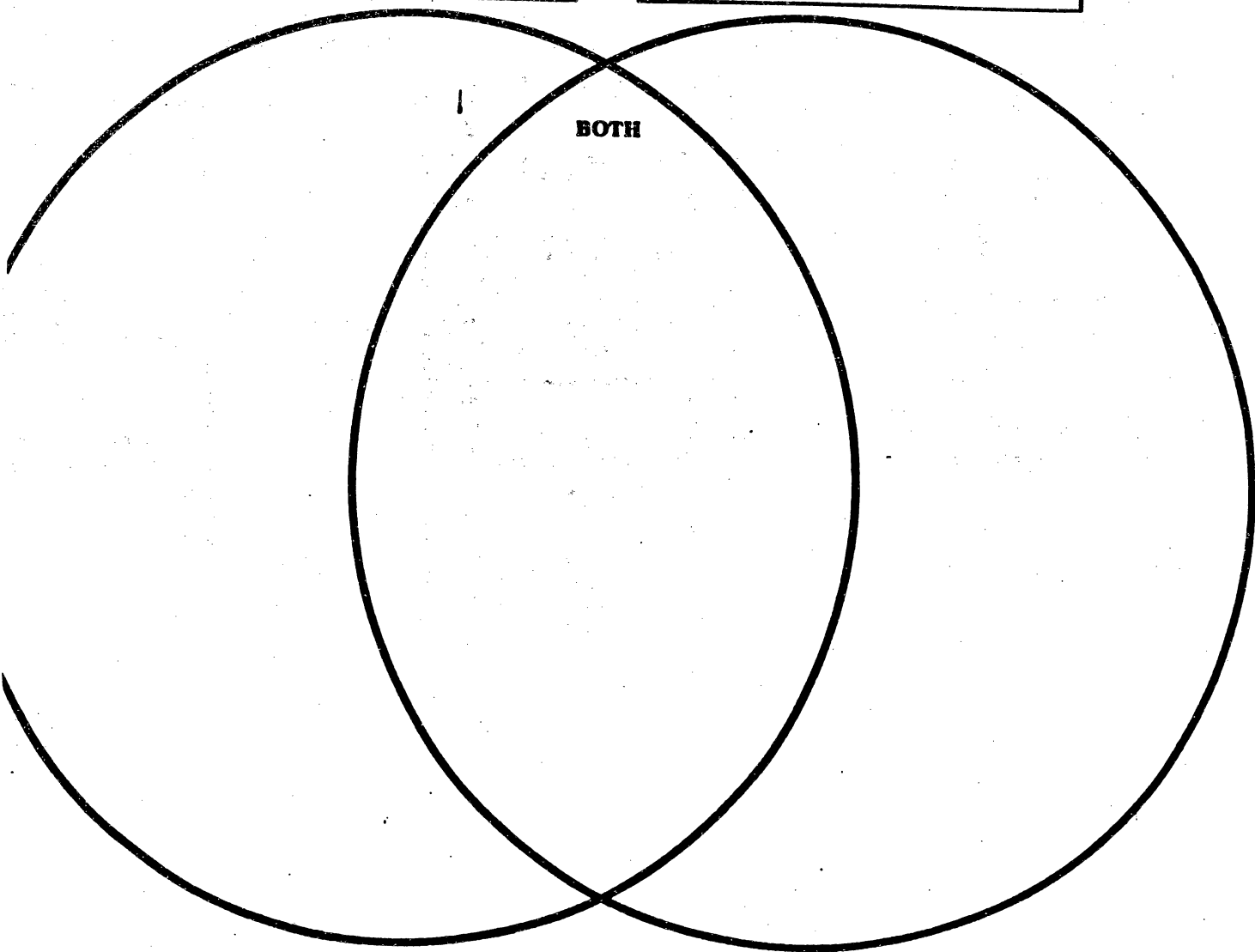
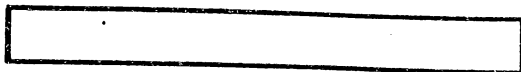
ADVANCE ORGANIZER



FISHBONE

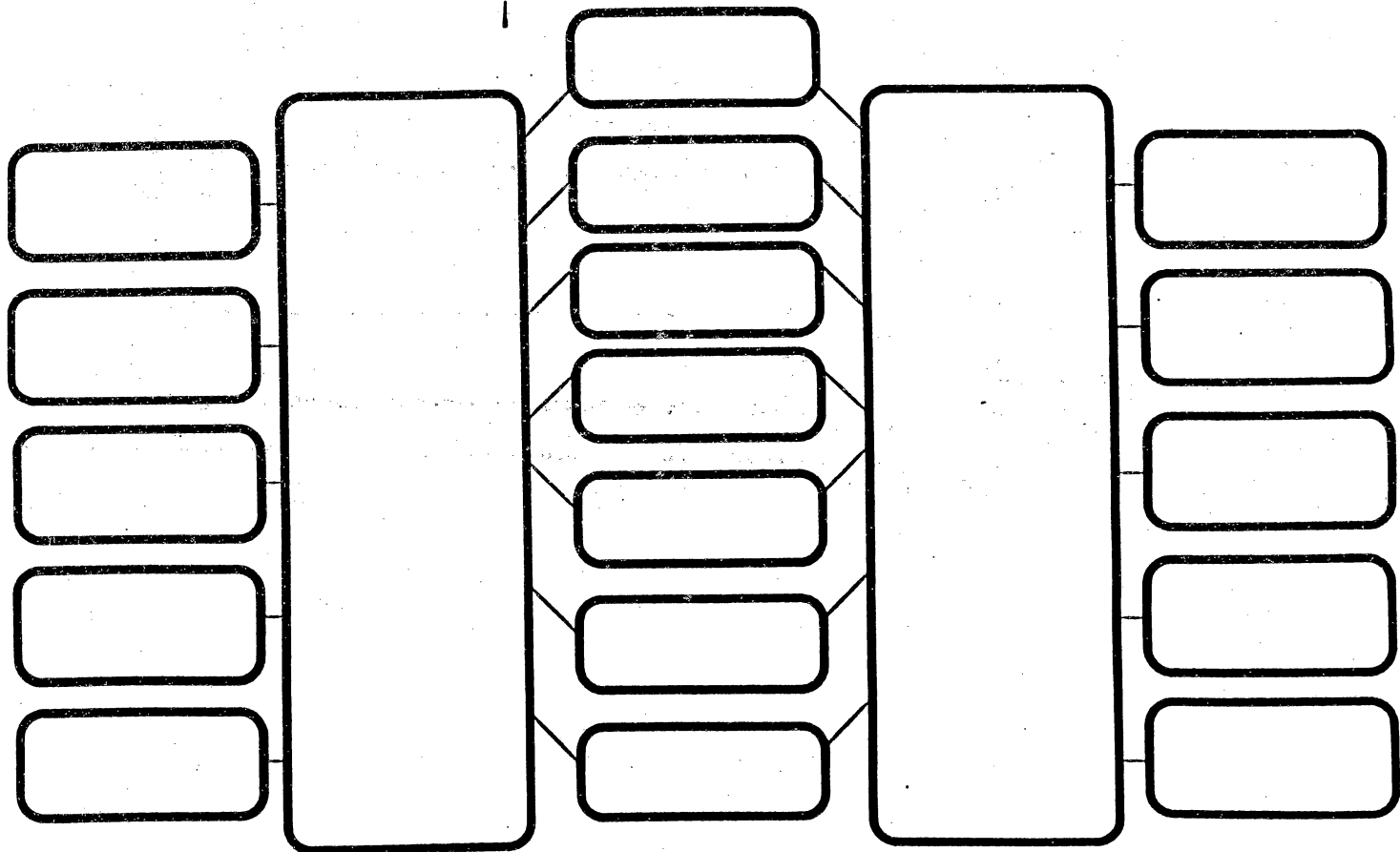
A fishbone diagram template. It features a central horizontal rectangular box with the word "TOPIC:" written inside. Six diagonal lines extend from the top and bottom corners of this central box, creating six trapezoidal sections for notes. Each of these six sections contains five horizontal lines for writing. The entire diagram is drawn with black lines on a white background.

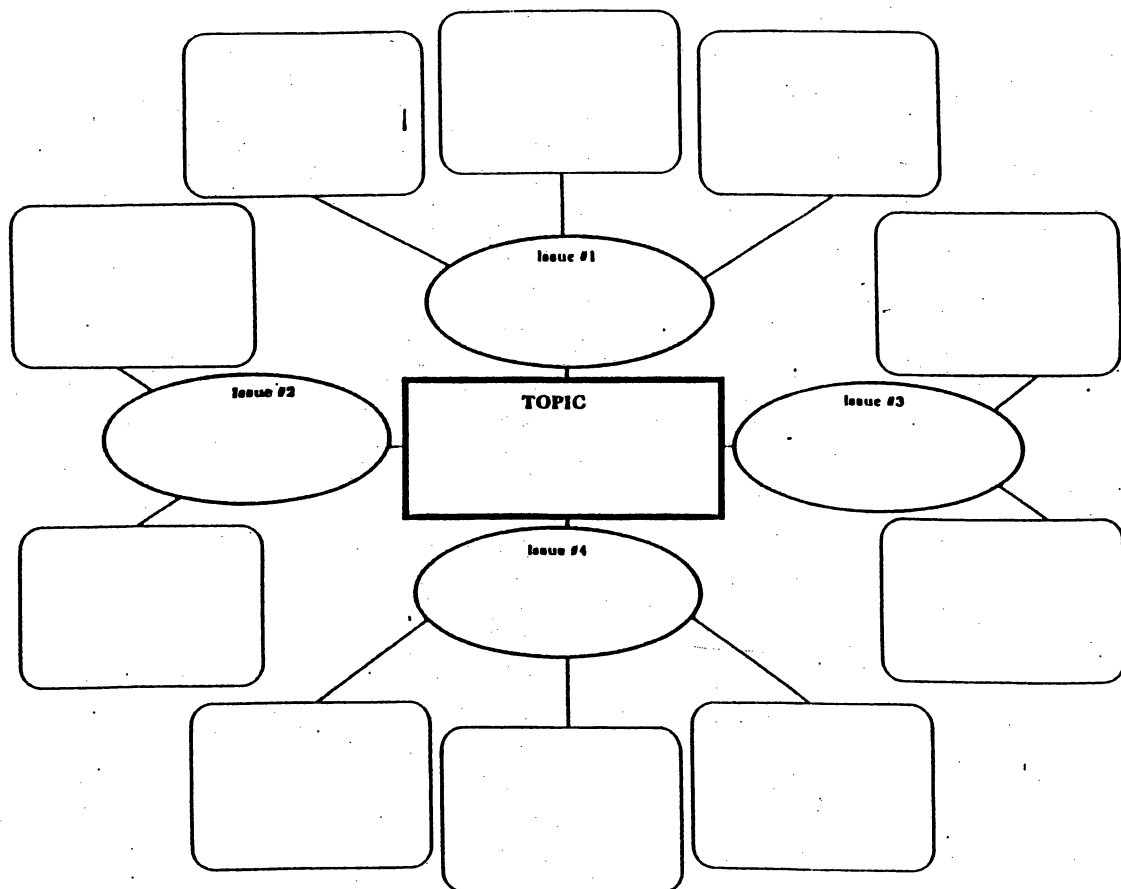




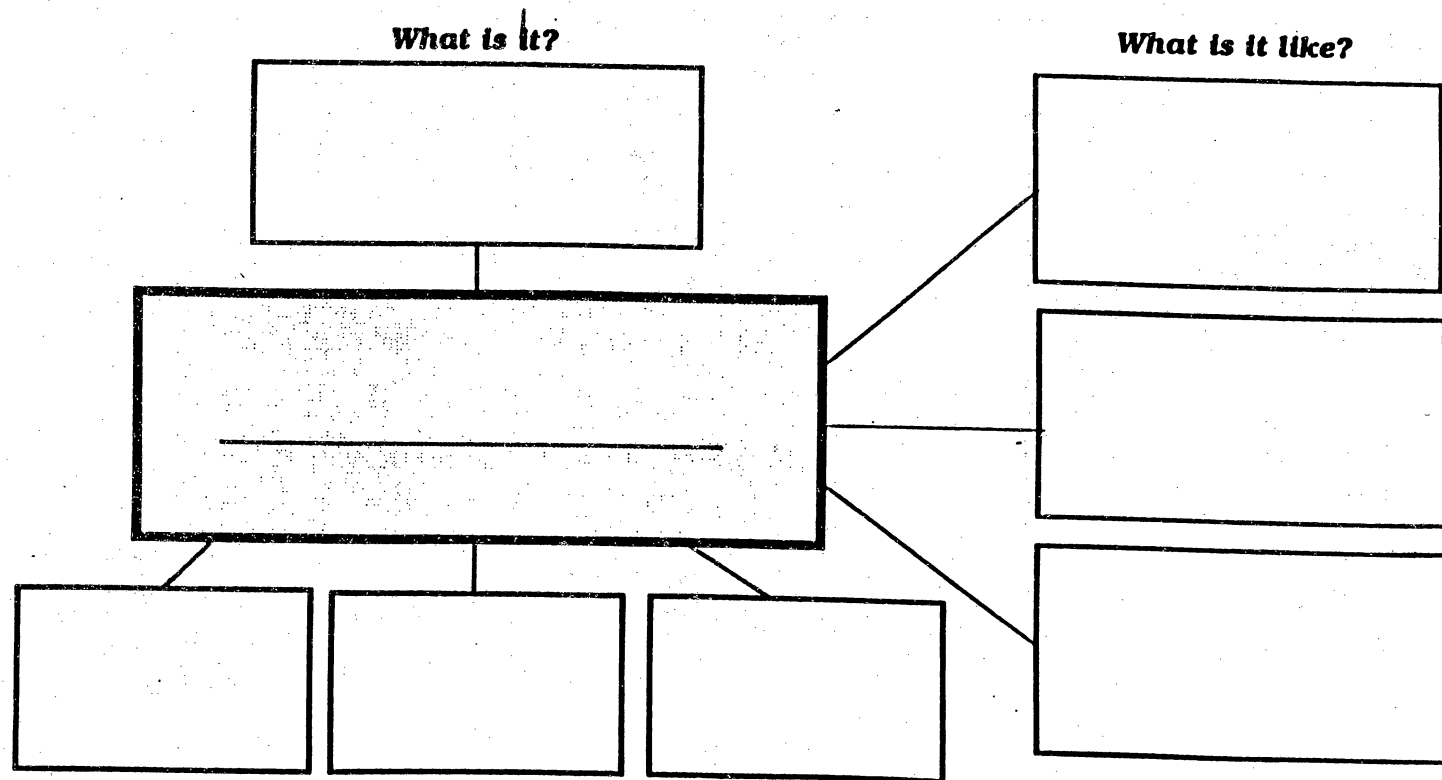
BOTH

THE DOUBLE BUBBLE





WORD MAP



<div> <div>Name</div> <div>Date</div> </div>		<div>K-W-L CHART</div>		<div> <div>Subject</div> <div>Period</div> </div>	
What I already KNOW about the topic.		What I WANT to know.		What I LEARNED about the topic.	

Page	Question	Answer

DOUBLE ENTRY JOURNAL

QUOTATION
What the text says.

RESPONSE
What my head says.

REFLECTIVE JOURNAL

Name _____ Date _____

Content Area: English • History • Math • PE • Science

What I Did**What I Learned****How I Can Apply It****Surprises I Experienced****What I Still Need to Know
About This Topic****Questions I Still Have**

DIALECTICAL JOURNAL

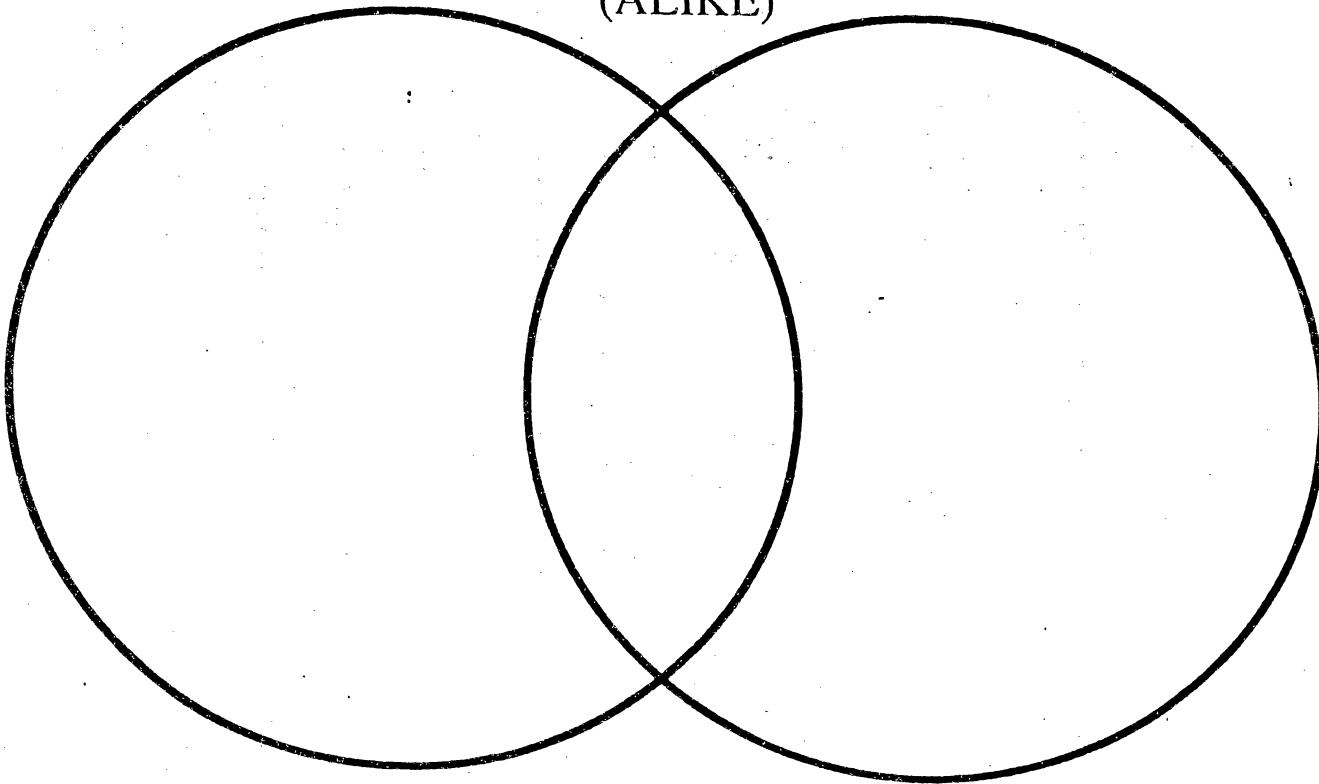
NOTE-TAKING	NOTE-MAKING
(Reading notes, direct quotes, observed notes, fragments, lists, images--often verbatim--always with page numbers)	(Notes about your left-column notes, summaries, formulations, revisions, editorial suggestions, comments about contents, comparisons, contrasts, inferences, judgments, & QUESTIONS)
"	
" (p. #)	
"	
" (p. #)	
"	
" (p. #)	

COMPARE/CONTRAST CHART
VENN DIAGRAM

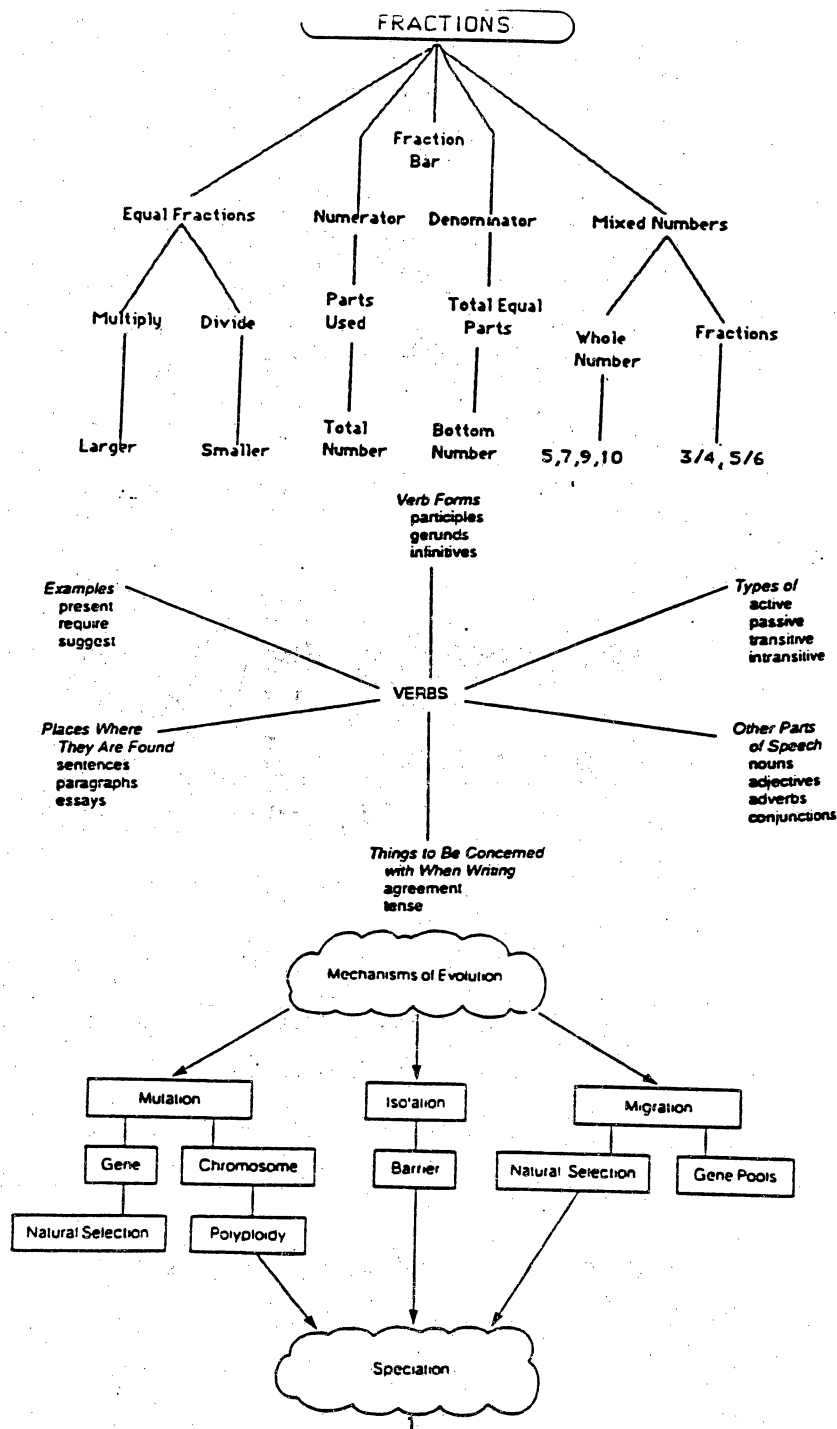
DIFFERENT

DIFFERENT

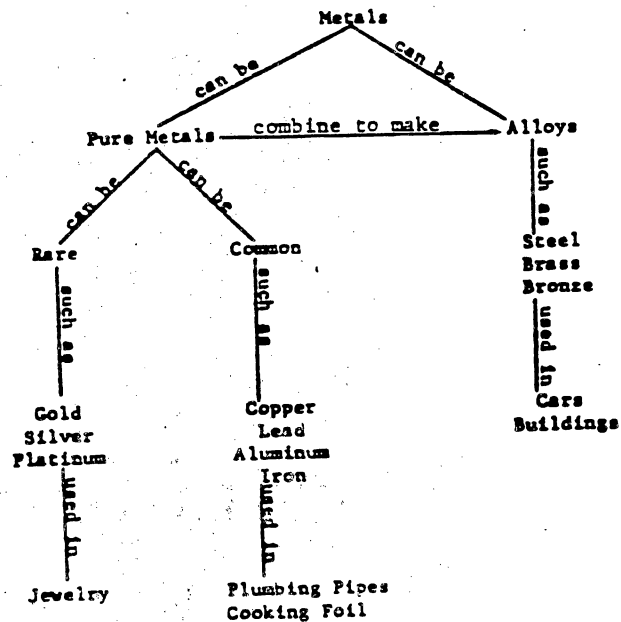
(ALIKE)



Appendix F- Concept Maps

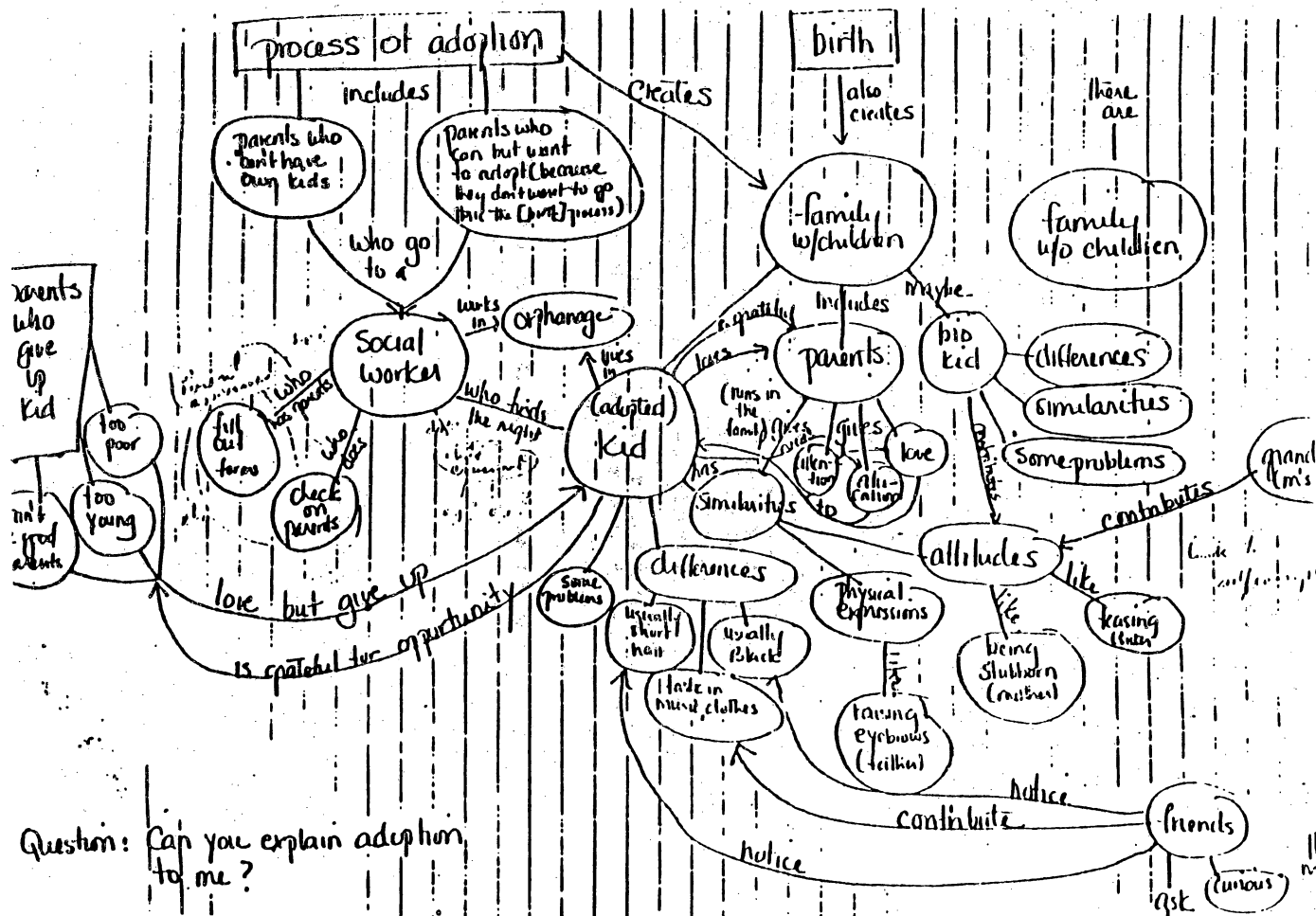


Concept Map of Metals Paragraph Information



Do you see how the concept map clearly shows all of the concepts, their rank order, and their interrelationships? Concept mapping is a visual means of summarizing information. Concept maps can be a valuable study aid.

*** Remember: the third step in concept mapping is to arrange the concepts on a piece of paper, most general to most specific, and to make and define connections between related concepts.



Appendix G- Resume and Cover Letter

112 Mercer Street
Princeton, NY 248745
February 6, 1999

Mr. Robert Thatcher
Assistant Superintendent, Personnel
Orange Unified School District
7692 Jones Road
Orange, CA 92866

Dear Mr. Thatcher:

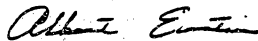
As a greatly accomplished physics professor, I look forward to serving such an excellent school district as Orange Unified. I have heard many positive things about the teachers and the students and await eagerly for your response.

I have been a physics professor for many years and have served at various colleges around the world. My area has always been physics, I know a great deal about it, and loving teaching it. So when I heard that the prior teacher, a Mr. Roundy, had been reassigned to the local institute for the emotionally challenged, I immediately sent you my resumé along with this letter. I developed the theory of relativity which is well known today and I have performed countless experiments and have given many lectures. I think these are important qualities that contribute to a physics class, or any other class for that matter.

My lectures have helped all of my students as well as myself; they have intensified my desire to help students develop and grow. They have also increased my craving to help students learn about the complicated field of physics and all of its intricacies. Further details and qualifications are included on the attached resumé.

Please send me application materials for a full-time teaching position for the 1999-2000 school year. I will contact you the week of the 21st so that I may have the opportunity to make an appointment to talk with you.

Sincerely,



Albert Einstein
(643) 786-7921

Enclosure

Albert Einstein

112 Mercer Street

Princeton, New York 248745

(643) 786-7921

CAREER OBJECTIVE:

Physics Teacher for Orange High School

EDUCATION

Attended ETH-Eidgenössische Technische Hochschule (Federal Institute of Technology)
Graduation in - 1900

Ph.D. from University of Zurich - 1905

Apprentice at the Zurich Physics Institute; gave lectures on 'The Theory of Radiation' - 1908-1909

PROFESSIONAL EXPERIENCE

One term at technical school in Winterthur, Switzerland - 1901

Private tutor to Louis Cohen for full academic year - 1901-1902

Technical Expert (Third and Second Class) at Bern Patent Office - 1902-1909

Filled position at University of Zurich as head of theoretical physics - 1908-1910

Professor of Physics at University of Prague - 1910-1911

Professor of Physics at ETH - 1911-1912

Professor of Physics at University of Berlin; headed the Kaiser Wilhelm Institute - 1914-1933

Professor of Physics at Princeton University - 1933-1945

ACHEIVEMENTS

Developed Theory of Relativity - 1919

Invited to attend the League of Nations Committee on Intellectual Cooperation - 1924

Visited President Franklin Roosevelt at White House; dined and stayed the night

Visted King Albert the first and Queen Elisabeth of Belgium - 1929

HONORS AND AWARDS

Awarded the first honorary doctorate from the University of Geneva - 1909

Awarded membership at Prussian Academy of Sciences - 1914

Made a Foreign Fellow of the Royal Society of London - 1921; highest honor that can be bestowed on a foreign person

Presented with Nobel Prize for Physics - 1922

Received the Copley Medal from the Royal Society of London - 1925

Awarded the Royal Astronomical Society's Gold Medal - 1926

GOALS

Find a unified theory; explains the way the universe works in one equation

REFERENCES

- Adams, J.J. (1990). Beginning to read; thinking and learning about print. Cambridge, MA: MIT Press.
- Adams, M., Trieman, R., & Pressley, M. (1996). Reading, writing and literacy. In Sigel, I. And Renninger, A. (Eds.). Handbook of Child Psychology, Volume 4: Child Psychology in Practice. New York: Wiley.
- Anderson, R.C. (1977). The notion of schemata and the educational enterprise. In R.C. Anderson, R.J. Spiro, and W.E. Montague (Eds.) Schooling and the acquisition of knowledge. Hillsdale, N.J. : Lawrence Erlbaum.
- Anderson, R.C., Spiro, R.J. , and Anderson, M.C. (1978). Shemata as scaffolding for the representation of information in connected discourse. American Educational Research Journal 15 (3). 433-440.
- Berger, A. and Robinson, H. (Eds.) (1982). Secondary school reading: what research reveals for classroom practice. National Conference on Research in English. ERIC Clearinghouse on Reading and Communication Shills. Urbana, Illinois.
- Brown, A.L., Campione, J.C., and Day, J.D. (1981). Learning to learn: On training students to learn from texts. Educational Researcher. 10,14-21.
- Bruner, J. (1973). Going beyond the information given. In J. Anglin (Ed.) Beyond the information given. New York: W.W. Norton.
- Carey, R., Harste, J., and Smith, S. (1981). Contextual constraints and discourse processes: A replication study. Reading Research Quarterly. 16(2), 201-212.
- Chomsky, N. (1957). Syntactic structures. The Hague: Mouton Press.
- Garner, R., and Reis, R. (1981). Monitoring and resolving comprehension obstacles: An investigation of spontaneous lookbacks among upper-grade good and poor comprehenders. Reading Research Quarterly. 16(4), 569-582.
- Goodman, K., Goodman, Y., Smith, E., Meredith, R. (1987). Language and thinking in school. New York, NY: Richard Owen.

- Howie, S. (1984). Writing in content areas. Boston: Allyn and Bacon, Inc.
- Juel, C. (1991). Beginning reading. In R. Barr, M.L. Kamil, P.B. Mosenthal and P.D. Pearson (Eds.) Handbook on reading research. New York: Longman. Vol.2, pp.759-788.
- Langer, J.A., and Nicolich, M. Prior knowledge and its effect on comprehension. Journal of Reading Behavior, (1981). 13 (4), 373-379.
- Liberman, I.Y., Shankweiler, D. (1985). Phonology and the problems of learning to read and write. Remedial and Special Education, 6(6), 8-17.
- Liberman, I.Y., Shankweiler, D. (1979). Speech, the alphabet and teaching to read. In L.B. Resnik and P.A. Weaver (Eds.) Theory and practice of early reading. Hillsdale, N.J.: Erlbaum. (Vol. 2, pp. 109-134).
- Lyon, G.R. (1995). Toward a definition of dyslexia. Annals of Dyslexia, 45, 3027.
- Morrison, C. (1996). How to build a long lasting fire: Writing poems from your life. Lincolnwood, Illinois: National Textbook Company.
- Myers, M. And Gray, J. (Eds.) (1983). Theory and practice in teaching composition: processing, distancing and modeling. Urbana, Illinois: National Council of Teachers of English.
- Pearson, P.D. and Johnson, D.D. (1978). Teaching reading comprehension. New York: Holt, Rinehart and Winston.
- Rumelhart, D.E. and Ortony, A. The representation of knowledge in memory. In R.C. Anderson, R.J. Spiro, and W. E. Montague (Eds.), Schooling and the acquisition of knowledge, Hillsdale, N.J.: Lawrence and Erlbaum.
- Smith, C., Smith, S.L., and Mikulecky, L. (1978). Teaching reading in secondary school content subjects. New York: Rinehart and Winston.
- Spiro, R.J., (1980). Etiology of reading comprehension style. In M. Kamil and A. More (Eds.) Perspectives in reading research and instruction. (Twenty ninth Yearbook of the National Reading Conference) Washington D.C.: National Reading Conference.

Tunmer, W. E., Pratt, C., and Herriman, M.L. (Eds.) (1984).
Metalinguistic awareness in children: theory,
research, and implications. New York: Springer-Verlag.

Vacca, R. T. (1981). Content area reading. Boston: Little
& Brown.

Vygotsky, L.S. (1962). Thought and language.
Cambridge, Mass: MIT Press.